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MOTHER AND DAUGHTER COMMUNICATION ABOUT SEXUAL HEALTH IN
RURAL KENYA

A Dissertation
Presented in
Partial Fulfillment of the
Requirements for the Degree of
Doctorate of Philosophy

BY
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NOVEMBER, 2010

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CHAPTER I

INTRODUCTION

The human immunodeficiency virus (HIV) and the syndrome it causes, acquired immune deficiency syndrome (AIDS), is largely considered both a health and human rights issue (Halperin et al., 2004). Globally, there are over 33 million people living with HIV and/or AIDS (HIV/AIDS); however, also impacted are their family members, friends, communities, and ultimately everyone in the world (Joint United Nations Programme on HIV/AIDS, 2009). According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), “in the 21st century, we are all living with HIV, and we must all be part of the response” (UNAIDS, 2006a, p. 6).

HIV/AIDS Description and Epidemiology

HIV is the virus that causes AIDS by attacking the body's immune system. The virus can be transmitted between individuals via infected blood, semen, or vaginal secretions that come in contact with openings in an uninfected person's skin or mucous membranes. AIDS is the final stage of an HIV infection, and involves a highly weakened immune system that is vulnerable to other infections. While there is no cure for HIV or AIDS, both HIV and AIDS are treatable, particularly in more developed countries (Centers for Disease Control and Prevention, 2006).

In December of 2008, there were 33.4 million people living with HIV/AIDS globally. In sub-Saharan Africa, approximately 22.4 million people live with HIV/AIDS, accounting for about 67% of all cases of HIV/AIDS and 70% of global AIDS deaths (UNAIDS, 2009). In contrast, approximately 2 million people in Latin America, 1.5 million in Eastern Europe and Central Asia live with HIV/AIDS, 1.4 million people in

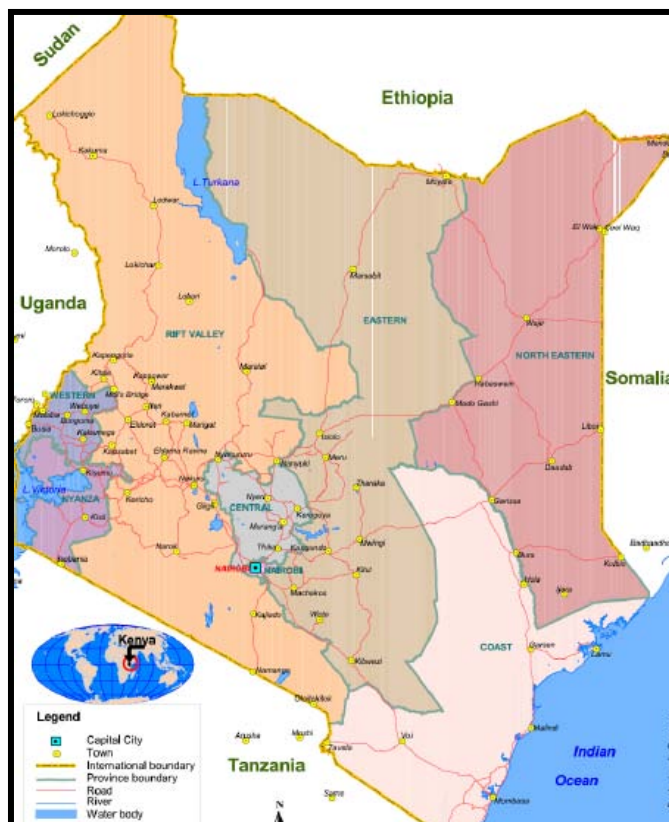
North America, 850,000 million people in East Asia, 850,000 in Western and Central Europe, and 240,000 in the Caribbean (UNAIDS, 2009). According to De Cock, Mbori-Ngacha, and Marum (2002):

“Inadequate resources, infrastructure, and commitment, and reluctance to address HIV/AIDS as a public health and infectious disease issue, are barriers to prevention and care in Africa’s high prevalence epidemic. These forces have increased individual and societal vulnerability, and enhanced stigma” (p. 71).

Kenya Country Information

Kenya is a sub-Saharan African country that has been hit particularly hard by the HIV/AIDS pandemic. The country is a former British colony located in North Eastern Africa bordering the Indian Ocean between Somalia and Tanzania. Kenya is also divided into seven provinces and one area, and includes the Central, Coast, Western, Eastern, North Eastern, Nyanza, and Rift Valley provinces, and the Nairobi Area.

Figure 1: Map of Kenya (Ministry of Health, 2009)



Kenya is a relatively small country with a dense population. Currently there are over 39 million people residing in Kenya. For additional perspective, Kenya is about twice the size of the state Nevada, in the United States (US), but has a population nearly 15 times greater (US Central Intelligence Agency, 2010).

Economically, Kenya is a major regional hub for trade in East Africa (US Central Intelligence Agency, 2010). However, according to a report from the Kenyan Central Bureau of Statistics (CBS), Ministry of Health (MOH), and ORC Marco (a private consulting firm), Kenya is also said to have had poor and inconsistent economic growth since gaining independence in 1963, which has contributed to “a deterioration in the overall welfare of the Kenyan population” (CBS, MOH, & ORC Marco, 2004, p. 2). In 2008, the employment rate was 40% (US Central Intelligence Agency, 2010). Moreover, in 2004, the national income poverty rate (defined as living below \$1.46 per day in urban areas and \$.68 per day in rural areas) was 57%, up from 52% in 1997 (United Nations Development Program, 2005).

Ethnically, Kenya is incredibly diverse, with 42 tribes coexisting throughout the country (CBS, MOH, & ORC Marco, 2004). According to the US Central Intelligence Agency (2007), the majority of Kenyans fall into nine groups including Kikuyu (22%), Luhya (14%), Luo (13%), Kalenjin (12%), Kamba (11%), Kisii (6%), Meru (6%), other African (15%), and non-African (e.g. Asian, European, and Arab, 1%). In addition, about 40 different languages are spoken in Kenya, though in urban areas most people speak the official languages (English and Kiswahili), and at least one indigenous language (Adams & Trost, 2005; US Central Intelligence Agency, 2007).

Religiously, the majority of Kenyans are Christian, with 45% being Protestant,

33% Roman Catholic, 10% indigenous beliefs, and 2% other religions (CBS, MOH, & ORC Marco, 2004; US Central Intelligence Agency, 2010). Interestingly, Catholicism has historically been more prominent in Kenya. However, a recent study by the Pew Forum on Religion and Public Life (2006) showed that Catholicism has been declining. Although Catholicism is still a prominent religion in Kenya, Protestant and other Christian religions have been increasing in popularity (Pew Forum on Religious and Public Life, 2006).

With regard to education, in 2005 there were over 7.5 million children enrolled in primary schools (CBS, 2006). Moreover, among youth aged 6 to 15 years, 89% were in school. However, it is also important to note that by age 16, only 51% of young men and 37% of young women attended school. In addition, the national illiteracy rate is relatively low, though it is higher among women (21%) than men (12%), and much less common among youth (CBS, MOH, & ORC Marco, 2004).

Socially, Kenya is patrilineal, patriarchal, and polygamous, though polygamy varies by region and is becoming less common among younger generations (Adams & Trost, 2005). In addition, it is important to note that Kenya has a matriarchal history. Some argue that initially and until relatively recent times, the dominant tribal group (Kikuyu) was matriarchal (Cavicchi, 1977). There is evidence of this within the Kikuyu creation myth. Creation involved a husband (Gikuyu) and wife (Muumbi) who had nine daughters that formed the original nine Kikuyu clans, united by their matrilineal descent (Finke, 2007).

HIV/AIDS in Kenya

The first case of AIDS in Kenya was noticed in 1984 (Kates & Leggoe, 2005). The first national response occurred in 1987 with the MOH's development of the AIDS Control Committee, which created a five year strategic plan aimed at AIDS control. In 1992, the Committee developed a second strategic plan that increased political commitment and outlined an institutional framework, but despite the efforts of the Committee, this was a period of "widespread denial" (MOH, 2005a). According to the MOH, the real effort to combat HIV/AIDS at a national level began when past President Moi declared AIDS a national disaster. Even more progress was made in 2002 when the current President Kibaki initiated the *Total War on AIDS* campaign, which brought together both religious and political leaders.

Current efforts in Kenya have been oriented around both prevention and treatment of HIV/AIDS (MOH, 2005a). Prevention efforts have included the establishment of voluntary counseling and testing centers, safe blood and safe injection efforts to decrease the number of intravenous HIV transmissions, prevention of mother-to-child transmission efforts, programs based on increasing and retaining HIV positive workers, and condom promotion. Treatment and care efforts for those living with HIV/AIDS have been geared around encouraging disclosure of HIV/AIDS status, promoting positive living strategies, promoting good nutrition and living a healthy lifestyle, improving the management of opportunistic and sexually transmitted infections medically, providing increased access to treatment with antiretroviral therapy, and providing home-based care and end-of-life support for those living with AIDS (MOH, 2005a). Such efforts are possibly paying off as there have been declines in HIV infection in Kenya since 2002 (UNAIDS, 2009).

That said, HIV/AIDS is still having a major impact on Kenya. The country has the 6th highest HIV/AIDS prevalence rate in sub-Saharan Africa (Kates & Leggoe, 2005). According to the 2007 Kenya AIDS Indicator Survey (a nationally representative study that included nearly 18,000 individuals) over 1.4 million people aged 15 to 64 years are living with HIV in Kenya, approximately 7.4% of the adult population (MOH, 2009). The HIV rates vary greatly by province, with the Nyanza Province (15% of adults) and Nairobi (9%) having the highest prevalence rates, and the Central (4%) and North Eastern Provinces (<1%) having the lowest rates (MOH, 2009).

UNGASS (2006) included speculation of a possible cause of the decline of Kenya's HIV incidence and prevalence. Specifically, the report cited *natural progressions* as a major contributing factor. According to the report, as the HIV/AIDS epidemic matures, death rates associated with AIDS-related conditions can be higher than HIV incidence rates, which in turn would decrease the prevalence of HIV/AIDS. In addition, the report also cited the fact that the early stages of the AIDS epidemic hit vulnerable populations (e.g., sex workers, injection drug users) the greatest, and that the magnitude of deaths within those populations essentially removed a main "circuit" of HIV transmission, causing both HIV incidence and prevalence rates to drop (UNGASS, 2006, p. 6). Finally, the report also highlighted another group that is particularly vulnerable to HIV infection in that region, namely women. In Kenya women are being impacted at a greater rate than men (8.4% compared to 5.4% among those aged 15 to 49 years) (MOH, 2009).

HIV among Young Women in Kenya

The HIV prevalence disparity is even greater among young women compared to older women. Specifically, in 2007 nearly 6% of young women aged 15 to 24 were infected with HIV, compared with 1.4% of young men (MOH, 2009). Young women are also an important demographic as the median age in Kenya is 18.7 years and 42% of the population is aged 15 years or less (US Central Intelligence Agency, 2010). In addition, the median age for first sexual experience is 18 years, though it is important to note that the median age for first sexual experience varies by ethnic group or tribe (CBS, MOH, & ORC Marco, 2004).

Two of the most comprehensive studies that investigated HIV/AIDS in Kenya are the Kenya Demographic and Health Survey (KDHS) 2003 (CBS, MOH, & ORC Marco, 2004) and the Kenya Behavioural Surveillance Survey (KBSS) 2002 (MOH 2005b). The KDHS 2003 included a nationally representative sample of almost 9,000 households. A total of 8,195 women aged 15 to 49 years and a sub-sample of 3,578 men aged 15 to 54 years in half of the households completed interviews and HIV tests. The KDHS 2003 also included information on 1,861 young women aged 15 to 19 years. The KBSS 2002 included 13,998 participants and focused primarily on populations that were deemed particularly vulnerable to HIV, including female sex workers, policemen, men in urban worksites, women in low-income settings, male matutu (public transportation) operators, male bodalboda (taxi bicycle) cyclists, and out-of-school youth. In-school youth aged 15 to 19 years were also interviewed. Both studies shed light on HIV/AIDS knowledge, attitudes, and behavior among young women.

With regard to knowledge of HIV/AIDS, both studies indicated a high level of awareness and basic knowledge among young women aged 15 to 19 years. Specifically, the KDHS 2003 found that 98% had heard of AIDS and 80% believed that there was a way to avoid HIV/AIDS (CBS, MOH, & ORC Marco, 2004). According to the KBSS 2002, 92% knew someone who had died of HIV/AIDS and 81% knew the difference between HIV and AIDS (MOH 2005b).

Both studies also found that most young women were aware of HIV-related risk reduction methods, though relatively few were aware of condoms. The KDHS 2003 found that 74% thought that one could reduce the risk of HIV/AIDS by abstaining from sex and 72% thought one could do so by limiting sex to one faithful partner. In contrast, only 53% believed that one could reduce the risk of HIV/AIDS by using condoms. Furthermore, young women aged 15 to 19 had lower levels of knowledge for all risk reduction methods than women in every older age group (CBS, MOH, & ORC Marco, 2004). The KBSS 2002 found even lower levels of knowledge of most risk reduction methods among in-school women aged 15 to 19 years. Although 82% knew about abstinence, only 63% knew that faithfulness to an uninfected partner could prevent HIV. Additionally, less than one-third (30%) knew about condoms (MOH, 2005b).

The KDHS 2003 and the KBSS 2002 also examined misperceptions about HIV transmission and found that a sizeable amount of young women endorsed myths about HIV/AIDS. The KDHS 2003 found that only 57% of young women aged 15 to 19 years were aware that “AIDS” could not be transmitted by mosquito bites, 65% were aware that a person could not become infected by sharing utensils with someone living with AIDS, and 78% were aware that a healthy looking person could have AIDS. Moreover,

only 43% rejected all three misconceptions (CBS, MOH, & ORC Marco, 2004). The KBSS 2002 evaluated the endorsement of six HIV/AIDS myths (e.g., that it would be possible for a person to get HIV through a taboo, a curse, or by other witchcraft, that having sexual intercourse with a virgin could cure AIDS, etc.). The study indicated that only 13% of the young women who were attending school had “comprehensive knowledge of HIV/AIDS.” In this case, *comprehensive knowledge* was said to be demonstrated by having heard of HIV/AIDS, reporting knowledge of abstinence, faithfulness, condom use, and absence of all six myths related to HIV transmission (MOH, 2005b).

With regard to attitudes, the KDHS 2003 found that most young women did not feel that they were vulnerable to HIV/AIDS. Specifically, 88% of young women felt that they had “no chance” or merely a “small chance” of “getting AIDS,” despite the high level of risk among this age group. Additionally, the young women were less likely than women aged 20 years or older to believe that they had a great chance of “getting AIDS” (CBS, MOH, & ORC Marco, 2004).

It seems that knowledge and attitudes had an impact on young women’s sexual risk reduction decisions. Specifically, the KDHS 2003 found that only 12% of the young women reported using a condom during their first sexual experience. In addition, 47% engaged in high-risk sex (described as sex with a non-marital, non-cohabitating partner in the past 12 months) and only 23% indicated that they had used a condom during their last high-risk sexual experience. Furthermore, nearly 4% of the young women reported engaging in paid sex in the past 12 months, and only 35% used a condom. Importantly, younger women were much more likely to engage in high-risk sex and paid sex than

women of all other age groups, and more likely than women aged 20 to 39 years to not have used a condom (CBS, MOH, & ORC Marco, 2004). The KBSS 2002 indicated similar results. Specifically, 17% of young women in school aged 15 to 19 years reported ever having had sexual intercourse, and only 31% used a condom during their first sexual experience (MOH, 2005b).

With regard to HIV testing both studies found a low rate of testing. The KDHS 2003 found that only 7% of the young women indicated being tested and informed of their HIV status. During the KDHS 2003 study, 75% of the young women consented to an HIV antibody test and 3% tested positive. The KBSS 2002 also found low levels of testing, indicating that only 8% of young women attending school had been tested for HIV (MOH, 2005b).

These findings indicate that young Kenyan women aged 15 to 19 years are disproportionately impacted by HIV/AIDS and they are disadvantaged when it comes to knowledge, attitudes, and behaviors. The KDHS 2003 and the KBSS 2002 indicate that young women only have a basic understanding and awareness of HIV/AIDS. Furthermore, they tend to have low levels of knowledge related to various sexual risk reduction methods and to endorse HIV/AIDS myths. Moreover, they do not tend to feel that they are at risk for contracting HIV. As mentioned, young women's knowledge and attitudes may culminate in a manner that negatively impacts their sexual risk reduction decisions, as both studies also indicated that young women engage in high-risk behavior and are unlikely to use condoms or get tested for HIV.

Sexual Health among Rural Women

An additional significant consideration in investigating the experiences of young women in Kenya is the distinction between urban and rural demography. Kenya is overwhelmingly rural. According to the KDHS 2003, a vast majority (81%) of the population resides in rural areas (CBS, MOH, & ORC Marco, 2004). Importantly, several studies have indicated HIV-related differences among rural and urban Kenyan adults and youth (CBS, MOH, & ORC Marco, 2004; Schuller et al, 2006; Voeton et al., 2004).

The KDHS 2003 included some information on rural and urban women that indicated discrepancies related to knowledge, attitudes, and behaviors that put women in rural areas at greater risk (CBS, MOH, & ORC Marco, 2004). Specifically, though most rural and urban residents had heard of AIDS (99% and 98%, respectively), rural women had less knowledge of HIV risk reduction behaviors (e.g., 58% of rural women knew that using a condom could prevent HIV transmission compared to 69% of urban women). Rural women were also much more likely to indicate misconceptions about HIV/AIDS (e.g., 44% of rural women, compared to 25% of urban women, believed that HIV could be transmitted through mosquito bites). Both rural and urban women indicated that they did not feel vulnerable to contracting HIV (about three-quarters of both groups felt that they had either *no chance* or *a small chance* of getting AIDS). With regard to behavior, women in rural areas tended to have their first sexual experience at an earlier age than urban women (17 years compared to 19 years) and were also less likely to use a condom during their last high-risk sexual experience (i.e., 23% of rural women used a condom during their last high-risk experience, compared to 32% of urban women).

Voeton et al. (2004) conducted one of the only studies to date that specifically focused on comparing sexual behavior among rural and urban young women in Kenya. The study used questionnaires to collect information from 548 young women aged 15 to 29 years that resided in either rural or urban districts. A main finding was that women in the rural areas were significantly more likely to engage in risky sexual behaviors when adjusting for socio-demographic differences. The “risky behaviors” included premarital sex at an earlier age, having a higher number of partners, and less frequent condom use with non-marital partners than their urban counterparts. Specifically, among rural women, 26% had a sexual debut before the age of 15 years, compared to only 12% of urban women. Rural women also reported an average of six lifetime partners, whereas urban women reported an average of four. Additionally, only 21% of rural women had used a condom during their last non-marital sexual act, whereas 41% of urban women had. Based on these findings, the authors concluded that there is a need to expand HIV and STI interventions to rural areas.

Schueller et al. (2006) investigated a variety of contextual factors that affect Kenyan youth and their access to HIV/AIDS and reproductive health programs. The authors identified another disparity among urban and rural youth. Specifically, the authors found that youth that live in rural areas often experience less exposure to HIV/AIDS information and prevention services. The authors also noted that youth in rural areas tend to live under stricter social, cultural, and gender norms that might also have a negative impact on HIV-related knowledge, attitudes, and behaviors.

Taken together, the findings from the KDHS 2003, Voeton et al. (2004), and Schuller et al. (2006), indicate that a focus on rural women is important when

investigating sexual health issues. First, rural residents are more representative of the overall Kenyan population (CBS, MOH, & ORC Marco, 2004). In addition, the KDHS 2003 indicates that women in rural areas have lower levels of knowledge of HIV risk reduction and transmission. Both the KDHS 2003 and Voeton et al. (2004) indicate that rural women, particularly young women, are more likely to engage in behaviors that put them at risk for acquiring HIV. Finally, Schuller et al. (2006) indicate that rural youth face greater barriers to HIV-related information and services.

HIV/AIDS and Reproductive Health

HIV/AIDS is not the only sex-related health issue that young women across Kenya face. The KDHS 2003 also found that among young women aged 15 to 19 years, 1% self-reported having a sexually transmitted infection (STI) in the past 12 months, while an additional 4% reported having *both* abnormal genital discharge and a genital sore or ulcer, which were viewed as symptoms of an STI (CBS, MOH, & ORC Marco, 2004). More recently, the 2007 Kenya AIDS Indicator Survey reported that 12.6% of young women aged 15 to 19 years were infected with herpes simplex virus-2, putting them more at risk for HIV (MOH, 2009). These findings indicate that a broader understanding of reproductive health among young women, beyond HIV/AIDS, is essential.

According to the World Health Organization (2005), reproductive health is best described as “a state of physical, mental, and social well-being in all matters relating to the reproductive system at all stages of life.” This definition implies that reproductive health is a right of all people to have information and access to services related to family planning and reproductive healthcare (World Health Organization, 2005). With regard to

youth, the World Health Organization (WHO) also emphasizes that two main issues in adolescent reproductive health are STIs and HIV/AIDS (WHO, 2007).

Ajayi et al. (1991) investigated broader reproductive health issues among youth in Kenya. The study focused on reproductive health with an emphasis on sexual health. Sexual health is a subset of reproductive health that can be described as “a state of physical, emotional, mental and social well-being in relation to sexuality” (WHO, 2005). Sexuality is said to be “a central aspect of being human throughout life and encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction” (WHO, 2005).

Ajayi et al. (1991) used a questionnaire to assess more than 3,000 unmarried Kenyan youth (1,513 female and 1,803 male participants) between the ages of 12 and 19 years. Participants were asked questions pertaining to reproductive health knowledge, premarital sex-related attitudes and behavior, and contraceptive-related attitudes and behavior.

A main finding of Ajay et al. (1991) was that over two-thirds (68%) of participants of both genders had received reproductive health information, typically from a school, friends, or same-gender parents. However, when participants were assessed for more in-depth information, responses indicated that their knowledge levels were low. For instance, the authors asked participants to identify the fertile period in a woman’s menstrual cycle and less than 11% of participants were able to do so. In addition, participants were asked about pregnancy prevention and more than 50% indicated that they believed douching or urinating after intercourse could prevent pregnancy. Less than 50% knew that pregnancy could occur after an individual’s first intercourse, without a

female orgasm, or when using the withdrawal method. Young women had lower levels of knowledge in each area compared to young men.

When asked about their attitudes related to premarital sex, the majority of participants (65%) indicated disapproval of premarital sex, and young women were more likely to disapprove than young men (68% compared to 63%). Despite many of the participants indicating that premarital sex was unacceptable, the majority of participants had engaged in premarital sex (51%). Moreover, young men were more likely to report premarital sexual experiences (62%) than young women (39%) and the mean age for first sexual experience was 13 years among young men and 14 years among young women.

With regard to contraceptives, young men felt that contraception was more acceptable than did young women (83% compared to 80%), but only 11% of participants reported ever using contraceptives. Methods of contraceptive use were not assessed; however, about 40% of participants reported that the main reason for not using contraceptives was lack of information.

Findings from Ajayi et al. (1991) indicate relatively high levels of reproductive health information exposure, yet lower levels of reproductive health knowledge. Moreover, findings speak to contradictions between values and behaviors. For instance, although the majority of participants did not find premarital sex to be socially acceptable, the majority had engaged in premarital sex. Moreover, although a vast majority of participants indicated that contraceptive use was acceptable, very few participants used contraception. Based on these paradoxes, the authors advocated increased efforts aimed at augmenting Kenyan youth's knowledge about reproductive health matters beyond HIV/AIDS.

Relatedly, an international call has been made to incorporate HIV/AIDS into broader reproductive health efforts. In an effort to integrate the two issues, Coggins and Senegal (1998) made the claim that AIDS is primarily a STI and should be couched within the field of reproductive health. The authors argue that HIV is transmitted in most cases through sexual contact and additionally, that co-infection with other STIs is common. More recently it has been found that being infected with a STI increases a person's chances of acquiring HIV (Centers for Disease Control, 2005).

Askew and Bererb (2003) conducted a literature review to assess the contributions made to date by sexual and reproductive health services to HIV/AIDS prevention and treatment. The review found that sexual and reproductive health programs make important contributions to HIV prevention and treatment because of the focus on family planning, sexually transmitted infections, and prenatal and delivery care. In addition, the authors note that STI control is also important both for reproductive health and HIV/AIDS control. The review concludes that more integrated efforts relating reproductive health care and STI/HIV/AIDS control should be developed to improve the outreach and impact of what are, to date, essentially independent efforts.

With regard to Kenya, Aloo-Obunga (2003) conducted a study to investigate the degree to which Kenyan institutions had managed family planning and reproductive health programs compared to HIV/AIDS programs, given the high HIV/AIDS prevalence in the country. The study found that there was an apparent *deliberate* shift toward the HIV/AIDS program at all levels (i.e., politically and programmatically) at the expense of the family planning and reproductive health programs. In addition, the study also found that the leading HIV/AIDS and reproductive health programs (both under direction of the

MOH) involved little collaboration, even on issues that clearly fell under the responsibilities of both programs (e.g., prevention of mother-to-child transmission of HIV).

When considering the aforementioned studies, it is clear that HIV/AIDS is part of the larger field of reproductive health and that this has been recognized at an institutional level. By investigating HIV/AIDS within the broader field of reproductive health, and focusing on sexuality and sexual health, a more comprehensive understanding of HIV prevention, particularly among young women, can emerge.

Sexual Experiences of Young Women in Kenya

To gain a better understanding of young Kenyan women's reproductive health issues, it is important to get a sense of young women's sexual experiences. Four Kenya-based studies have captured sexual experiences of youth. Toroitich-Ruto (1997) conducted a national study that highlighted information on young women's early sexual experiences. Maticka-Tyndale et al. (2005) investigated the sexual scripts of Kenyan youth. Nzioka (2001) assessed the influence of gender relations on the sexual experiences of Kenyan youth. Schueller et al. (2006) investigated the manner in which contextual factors impact Kenyan youth's access to HIV/AIDS and reproductive health programs. Although the aforementioned studies tended to focus on both genders, taken together these studies offer a holistic portrait of young women's sexual experiences in Kenya.

Toroitich-Ruto (1997) collected data from secondary schools in 17 districts of Kenya and participants included 9,208 never-married young men and women aged 15 to 24 years. In this study, 94% of participants were between the ages of 15 to 19 years. Key

findings were related to sexual debut. The majority of all participants (54%) had sexual intercourse prior to the age of 15 years. Most young women had begun menstruating by the age of 14 (52%) and nearly a quarter had their first sexual intercourse before their first menstruation (24%). Moreover, 56% of participants did not find their first sexual experience enjoyable, and 24% of the participants' first sexual experience was forced.

Maticka-Tyndale et al. (2005) expands the findings of Toroitich-Ruto (1997) by using scripting theory as a framework to understand Kenyan youths' sexual experiences. According to the author, scripting theory insinuates that sexual activities are understood as constructed from the interaction between cultural messages about sexuality, identification of situations as sexual, and interpersonal negotiation. Moreover, sexual activity is theorized as the end result of a codified sequence of events which is much like the script of a play.

The study included 28 single-sex focus groups with youth between the ages of 11 and 16 years. A main finding of the study was that early sexual encounters tended to be both instigated and controlled by male youth. Specifically, a typical script began with a young man initiating an encounter by writing a letter and sending it through a paid mediator (typically a peer or slightly older young person, viewed as having persuasive power or authority) accompanied with a gift or money. Although the script was typically initiated by young men, young women were at times described as initiating the script by signaling their interest with type of dress, grooming style, gestures, movements, or actions.

Next, the negotiation of sexual contact hinged on the young woman's acceptance of the gifts that were often accompanied by proclamations of love and desire. However,

despite the amorous nature of the initial encounter, sexual encounters were typically referred to as *cheating*, while the act itself referred to as *playing sex*.

The study indicated that boyfriend-girlfriend relationships were considered a new phenomenon in Kenyan culture, as until recently in most areas youth married at a young age. In fact, the KDHS 2003 found that the age at first marriage among young women has been steadily increasing over the last decade and is currently 19.8 years. Importantly, this age is said to vary between different provinces, and with different levels of education (KDHS, 2003). Thus, the dating experience was often described as puzzling, and mainly centered on *playing sex*.

During this experience it was also customary for the young women to initially refuse the young men's advances, sometimes manipulating the young men into paying with better gifts. However, at a certain point, persistent promises and gifts, if unrequited, were said to give way to threats, insults, and potentially assault, rape, or death. Within the study, young women reported little or no control over how, when, or where playing sex occurred.

Nzioka (2001) gained additional insight into young women's sexual experiences when conducting 16 focus groups with 184 adolescents aged 15 to 19 years. The objective of the study was to understand the perceptions, norms, and gender relations that govern the sexual behaviors of Kenyan adolescents. Main themes from the study included common censorship of sexuality among the young women. Both young women and men indicated negative images of young women that engaged in premarital sex, referring to them as "loose," "prostitutes," "spoilt," and "rotten." In contrast, perceptions of young men that engaged in premarital sexual intercourse ranged from "heroes,"

“adventurous persons,” and “risk-takers,” to “normal,” and in some cases “out to ruin girls,” “spoilt,” and “badly behaved” (Nzioka, 2001, p. 137-138).

Similar to Maticka-Tyndale, et al. (2005), Nzioka (2001) also found that a lack of assertiveness and ability to negotiate sexual experiences was common among young women. The study also indicated that rapes occurred occasionally, though parents or authorities were rarely informed unless a girl got pregnant, as girls were often said to have been raped by “friends” (Nzioka, 2001, p. 139). Taken as a whole, Nzioka (2001) also demonstrates a lack of power that many young women in Kenya face during sexual encounters.

Schueller et al. (2006), a previously mentioned study, had similar findings related to gender inequality. In a broad-based assessment of Kenyan reproductive health and HIV/AIDS programs commissioned by Family Health International (FHI) and the United States Agency for International Development (USAID), Schueller et al. (2006) investigated contextual factors affecting Kenyan youth. The authors interviewed representatives from 41 different organizations and held 24 small group discussions. Organizations included government agencies, donor agencies, international organizations, local non-governmental organizations, and service delivery sites. Small group discussions included youth and parents aged 12 to 32 years from across Kenya.

A main area of focus was determining how youth-centered reproductive health and HIV/AIDS programs addressed the needs of youth at different life stages and in varied settings. With regard to contextual factors affecting Kenyan youth, Schueller et al. (2006) gender norms were viewed as an important cultural factor. Specifically, the

authors identified that Kenya is a patriarchal society and that gender inequality is prevalent in many aspects of Kenyan society. According to the authors:

“Gender issues affect youth reproductive health and HIV/AIDS at nearly every level: access to contraception, access to ante-natal care and safe delivery facilities; vulnerability to infection; stigma and discrimination; prevention behavior; and access to treatment” (Schueller et al., 2006, p. 11).

In addition, another important finding of Schueller et al. (2006) was related to available social support systems. The authors noted that within Kenya it is recognized that families and communities must be a part of HIV/AIDS and other prevention efforts. However, the authors also found that a gap existed in creating supportive environments for youth to maintain healthy behaviors. Based on this the authors recommended that programs incorporate efforts aimed at increasing the knowledge and efficacy of parents to communicate with youth about sexual experiences.

Findings from Toroitch-Ruto (1997), Maticka-Tyndale et al. (2005), Nzioka (2001), and Schueller et al. (2006) all shed light on the sexual experiences of young women in Kenya. Further, all of the studies indicate the pressures and barriers that young women face in protecting their sexual health. Moreover, Schueller et al. (2006) emphasizes the importance of broadening youth-based interventions to include parents.

Theoretical Framework: Parent-Based Extension of the Theory of Planned Behavior

Hughes and McCauley (1998) conducted a review of literature that investigated adolescents' needs for programs aimed at improving reproductive health in developing countries. The authors determined that interventions must focus on adult community members, particularly parents, to help them become more informed and efficacious in providing accurate information and skills training to adolescents and to ultimately enable the adolescents to adopt healthy behaviors. One theoretical framework that offers an

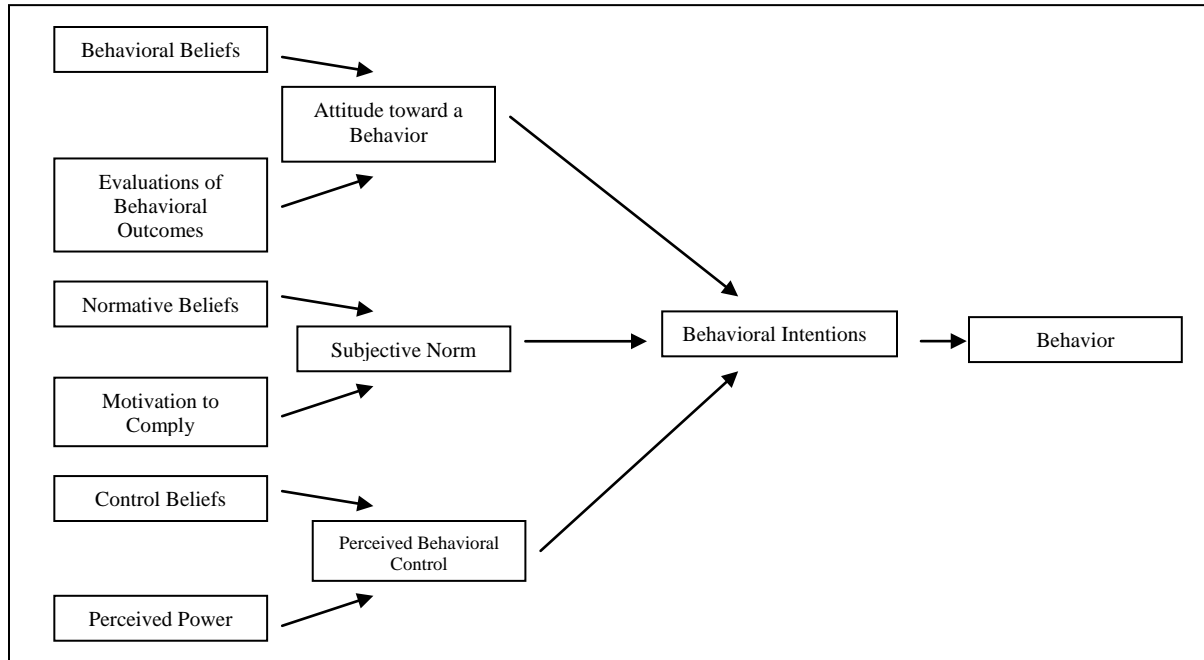
opportunity to do so is the parent-based expansion of the theory of planned behavior (Hutchinson & Wood, 2007a).

The parent-based expansion of the theory of planned behavior builds upon the traditional framework of the theory of planned behavior (TPB) to incorporate the influence of parents on adolescent HIV-related sexual behaviors. The TPB builds upon the theory of reasoned action (TRA), a model that is concerned with the way in which individual motivational factors determine the likelihood of performing a specific behavior (Ajzen & Fishbein, 1980). The TPB adds to the TRA to include the influence of perceived behavioral control on performance of the behavior (Ajzen & Madden, 1985). According to Ajzen and Madden (1985) behaviors are motivated by behavioral intentions. Moreover, attitude toward performing the behavior, the subjective norm associated with that behavior, and perceived behavioral control are all said to influence behavioral intentions (see *Figure 2* for additional information).

Specifically, attitude toward a behavior may be favorable or unfavorable and is impacted by *behavioral beliefs* (beliefs that a behavior is associated with specific outcomes) and *evaluations of behavioral outcomes* (that there is a value attached to a behavioral outcome). Subjective norm refers to the perceived social pressure to perform or to not perform the behavior and is influenced by *normative beliefs* (the belief that proximal individuals approve or disapprove of a behavior) and *motivation to comply* (the motivation to comply with proximal individuals' judgment). Finally, perceived behavioral control is belief related to control over a specific behavior and is influenced by *control beliefs* (the perceived likelihood of an occurrence of a facilitating or constraining

condition) and *perceived power* (the perceived effect of each condition in making a behavioral performance easy or difficult).

Figure 2: Theory of Planned Behavior (Montano & Kasprzk, 2002)



The TPB can be applied to youth sexual risk reduction behaviors. For instance, one would assume that a risk reduction behavior (e.g., using a condom) is influenced by the adolescent's intentions to engage in the risk reduction behavior (i.e., intention to use a condom). Moreover, these behavioral intentions would be influenced by attitude toward a behavior, subjective norm, and perceived behavioral control.

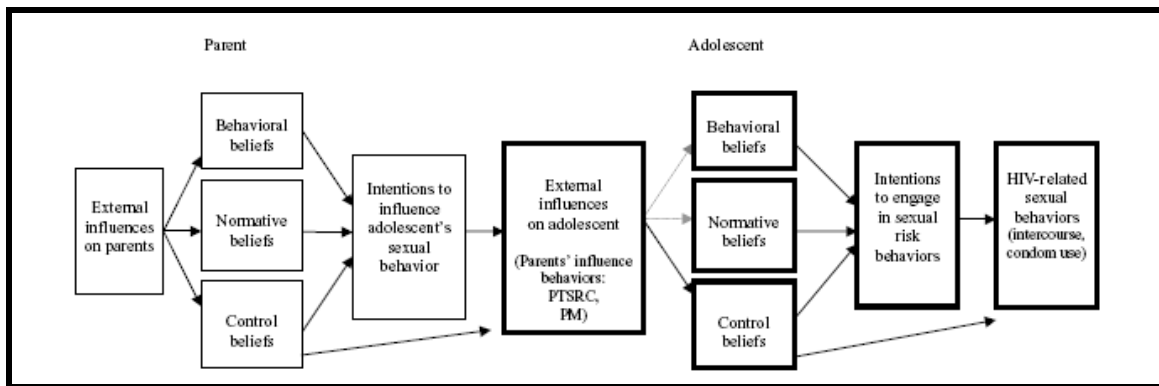
The adolescent's attitude toward using a condom (i.e., whether using a condom is viewed as important or not), would be influenced by the degree to which he or she believed that using a condom will reduce sexual risk (*behavioral beliefs*) along with belief that reducing sexual risk is important (*evaluation of behavioral outcomes*). The subjective norm associated with using a condom (i.e., the degree to which the adolescent

senses that using a condom is important among most people) would largely be impacted by whether using a condom is acceptable among people within the adolescent's proximity (*normative beliefs*) and the whether the adolescent values what others in the proximity believe (*motivation to comply*). Lastly, perceived behavioral control in using a condom (i.e., the degree of control an adolescent perceives in using a condom) would be impacted by facilitators or barriers to condom access (*control beliefs*) and the perceived impact of the facilitators or barriers on condom use (*perceived power*).

Albarracin, Johnson, Fishbein, and Muellerleile (2001) conducted a meta-analysis of 96 data sets that tested the utility of the TRA, the TPB, or both models in predicting condom use. The meta-analysis included data sets from throughout the world (i.e., from North and South America, Caribbean Islands, Europe, Africa, and Australia). Results of the analysis indicated that both the TRA and TPB frameworks were useful predictors of condom use. The authors found that participants were more likely to use condoms if they had previously formed corresponding intentions that were derived from attitudes, subjective norms, and perceived behavioral control.

Recently, in an attempt to apply the TPB to adolescent sexual risk, Hutchinson and Wood (2007a) developed the parent-based expansion of the theory of planned behavior (PETPB). In essence, the authors built upon the TPB to also include the role of parents (see *Figure 3* for more information). Specifically, the new model considers the manner in which external influences on parents can impact their beliefs and intentions, which are ultimately said to impact adolescents' sexual behaviors.

Figure 3: Parent-Based Expansion of the Theory of Planned Behavior (Hutchinson & Wood, 2007a)



The PETPB also incorporates another theoretical framework, namely Bronfenbrenner's Ecological Systems Theory of Human Development (Bronfenbrenner, 1977; Bronfenbrenner, 1988). Ecological levels of analysis are a central tenant in the field of Community Psychology and take into consideration the interdependent layers of relationships between individuals and communities (Dalton, Elias, & Wandersman, 2001). The ecological model takes into consideration that individuals are influenced by other individuals throughout a series of nested systems. According to Bronfenbrenner's theory, the systems move from smallest to largest and include the microsystem (a complex set of relations between an individual and the immediate environment), mesosystem (the interrelations among major settings that are essentially a system of microsystems), exosystem (an extension of the mesosystem social structures that do not contain the individual but influence an individual's behavior), macrosystem (the overall institutional patterns of a culture or subculture, from which all other systems manifest), and the chronosystem (the historical sequence and context). With regard to PETPB,

adolescents are viewed as nested within these systems, which include the family, community, and the greater society. Although the authors recognize that an adolescent is influenced by community and larger society, family is viewed as one of the most proximal and influential factors on an adolescent's sexual risk behaviors.

Results from an earlier study demonstrated support for the PETPB framework (Hutchinson et al., 2003). The authors conducted a study investigating the influence of mother-daughter communication on sexual risk behaviors. The study included 219 African American and Latina female adolescents aged 12 to 19 years and their mothers. The study also investigated mediation effects related to components of the TPB. Results indicated that communication related to sexual intercourse, contraceptives, and STIs, was associated with a decrease in the number of sexual intercourse encounters and a decrease in the number of unprotected intercourse encounters. Another main finding was that the relationship between communication and protected sexual intercourse encounters was mediated by condom use self-efficacy.

Later, Hutchinson et al. (2007b) investigated the PETPB among Jamaican adolescents and their parents. The study utilized brief surveys and included separate focus groups with 16 parents and 41 adolescents aged 12 to 18 years. They also conducted a focus group with ten teachers and guidance counselors. The adolescents' behavioral beliefs were assessed by asking about their beliefs related to sexuality, condom use, and HIV/AIDS. The adolescents' normative beliefs were assessed by asking about whose opinions were important regarding sexuality and condom use. The adolescents' control beliefs were assessed by asking the adolescents about the availability of condoms, their ability to use condoms, and their ability to persuade their partners to

use condoms. Finally, the adolescents' behaviors were assessed by asking about their sexual experiences and condom use. Results of the study indicated that behavioral beliefs were closely related to condom use intentions and behaviors. Efficacy beliefs (i.e., that condoms are effective in preventing pregnancy, STIs, and HIV infection) were associated with intentions to use condoms. With regard to normative beliefs, key normative referents included mothers, fathers, peers, teachers, and church and community members. Among the key normative referents it was found that mothers and the church community members were generally opposed to adolescent sexual activity. Other normative referents tended to hold mixed messages about adolescent sexuality. With regard to control beliefs, female adolescents reported greater concern with accessibility of condoms and reported an inability to negotiate sexual activity and condom use with their sexual partners. Based on these findings, the authors recommended the development of interventions in Jamaica that include parents and aim at increasing parental monitoring of sexual behaviors and sexual communication.

Taken as a whole, these studies indicate that parent-child communication about sexual health can play a key role in decreasing sexual-risk behaviors among adolescents. Hutchinson and Wood (2003) indicated that mother-daughter communication about sexual health risk behaviors led to decreases in sexual intercourse and unprotected sexual intercourse among young women in the US. Hutchinson et al. (2007b) indicated that parents, and in particular mothers, had an impact on Jamaican adolescents' sexual risk-taking behaviors. However, the theoretical model has yet to be investigated outside the US and Jamaica.

Parent-Child Communication and Sexual Health: US

In the US research and efforts to include parents in youth-related sexual health interventions have been more longstanding than in Kenya (Forehand, Miller, Armistead, Kotchick, & Long, 2004). Many US-based studies have empirically demonstrated the importance of involving parents in HIV/AIDS prevention and other sexual risk reduction efforts and emphasize parent-child communication.

Carabasi, Greene, and Bernt (1992) conducted an early study on parent-child communication that investigated the knowledge and attitudes of seventh and eighth grade students regarding AIDS. The study included 412 seventh and eighth grade students and assessed them using a questionnaire. Results indicated that, overall, participants tended to report high levels of knowledge and positive attitudes towards people living with HIV/AIDS. It was also found that having discussed AIDS with a parent was directly related to higher levels of knowledge and more positive attitudes about a range of AIDS related issues (e.g., “More medical help should be given to people living with AIDS”).

Miller, Levin, Whitaker, and Xu (1998) also investigated parent-child communication, but focused specifically on mothers. Additionally, while Carabasi, Greene, and Bernt (1992) investigated knowledge and attitudes, Miller et al. (1998) investigated preventive behavior. The study focused on the impact of timing of mother-child condom discussions on condom use during adolescents’ first sexual experiences and those thereafter. Time periods for the communications included those prior to first sexual experience, during the year of which the first sexual experience occurred, the year after which first sexual experience occurred, or never. Participants included 372 sexually active adolescents aged 14 to 17 years residing in the states of New York and Alabama, or

Puerto Rico, a US territory. Participants completed a survey that assessed both the age at which they first discussed condoms with their mother along with their age at first sexual intercourse.

A main finding of Miller et al. (1998) was that adolescents that talked with their mother about condoms were significantly more likely to use a condom during their first sexual experience. Moreover, the study also found that adolescents that used a condom during first sexual intercourse were significantly more likely to use a condom from that point onward. Thus, the authors inferred that mother-child communication about condom use that occurred before the year of first condom use had a direct effect of increasing condom use during first sexual experiences.

Dutra, Miller, and Forehand (1999) conducted additional analyses on the data collected in Miller et al. (1998). In contrast to Miller et al. (1998), Dutra, Miller, and Forehand (1999) focused on the role of parents in general, as opposed to solely mothers, in order to understand the relationship between parent-adolescent sexual communication and adolescent sexual risk-taking behavior. A subset of participants from the earlier study included 332 African American and Latino/a adolescents aged 14 to 16 years from Alabama, New York, and Puerto Rico whose biological parents were married and residing together. Hierarchical regression analyses were conducted to examine the relationship of sexual communication and sexual risk-taking behavior. Sexual risk-taking levels varied from a low of never having had sexual intercourse to a high level of risk based on multiple partners and inconsistent condom use. The main finding was that increased communication with mothers led to decreased frequency of sexual risk-taking behaviors, though this was not the case among fathers. Based on the findings the authors

inferred that adolescent communication with mothers played a key role in prevention of sexual risk-taking behaviors and should be emphasized in interventions. Coupled with the findings from Miller et al. (1998), these findings indicate that communication with mothers increases adolescent preventive behavior and decreases adolescent sexual risk taking behavior.

Kotchick, Dorsey, Miller, and Forehand (1999) investigated the impact of mothers' sexual behavior, attitudes about adolescent sexuality, and communication with their children about sex on adolescent sexual risk-taking behavior. The study also built upon data from Miller et al. (1998), but focused on children residing with single head of household mothers. The participants included 397 African American and Latino/a adolescents and their mothers. Results from a hierarchical linear regression analysis included a weak relationship between levels of mother sexual risk-taking behavior and levels of adolescent sexual risk-taking behavior. However, the quality of communication about sex between the mother and adolescent emerged as a significant predictor of adolescent risk-taking behavior. Specifically, more open and receptive communication was associated with less sexual risk-taking among adolescents. Interestingly, adolescent sexual risk-taking was not associated with the content of the sexual discussions. This prompted the authors to infer that interventions aimed at increasing sex-related communication, in general, were necessary. These findings indicate that it is not solely attitudes of a parent, but more so parent willingness to communicate with their child about sex that impacts sexual risk-taking behaviors among adolescents.

Dittus, Jaccard, and Gordon (1999) investigated communication between mothers and adolescents about premarital sexual intercourse to better understand the degree to

which maternal influence impacted adolescents' beliefs about sexual behavior.

Participants included 751 African American adolescents aged 14 to 17 years and their mothers. A main finding of the study was that the adolescents tended to adopt beliefs that were similar to their mothers'. Additionally, the study found that the more explicitly a mother discussed the topic, the more likely the adolescent was to endorse the belief. An interesting finding of the study was that mothers' beliefs were a stronger predictor of the adolescents' beliefs than were their sexual communications. In essence, a mother's beliefs could have an impact on the adolescent beliefs, even if the mother did not intend to communicate such values. Findings from this study seem to counter those in Kotchick et al. (1999) which found no relationship between a mother's attitude and an adolescent's sexual risk-taking behaviors. However, Dittus, Jaccard, and Gordon (1999) focused on adolescent's attitudes, whereas Kotchick et al. (1999) focused on behaviors.

Karofsky, Zeng, and Kosorok (2000) also focused on adolescent behaviors. The authors conducted a longitudinal study including 203 adolescents aged 12 to 21 years over period of 5 years. The study compared parent-child communication among adolescents that had engaged in sexual intercourse and those that remained abstinent. Results indicated a correlation between level of adolescent-parent communication (reported by the adolescent) and lack of initiation of first sexual intercourse. Specifically, increased ratings of sexual communication with mothers were positively correlated with abstinence among adolescents in the study. This study lends additional support to the findings presented in Dutra, Miller, and Forehand (1999) with regard to the important role of mothers in adolescent sexual risk reduction efforts.

Importantly all of the aforementioned US-based studies have investigated the impact of parent-child (in most cases mother-child) communication on adolescent behaviors. More recently studies have been published investigating the impact of mother-child communication on daughters' sexual risk-taking behaviors.

Hutchinson (2002) investigated the influence of both mothers' and fathers' influence on daughters' sexual risk-taking behaviors. The study included 234 Latina, African American, or Caucasian young women aged 19 to 21 years. The study assessed differences in mother-daughter and father-daughter communication, the relationship between timing of sexual risk communication and sexual risk-taking behaviors, the impact of the quality of communication on sexual risk-taking behaviors, and the role of ethnicity as a moderator of sexual risk-taking behaviors. A main finding of this study was that the young women were more likely to engage in sexual communication with their mothers than their fathers. The authors also found that mother-daughter communication prior to the daughter's engagement in sexual activity decreased the likelihood of daughters initiating sexual intercourse and also increased the likelihood of condom use among daughters that did initiate sexual intercourse. Furthermore, condom use increased with the quality of communication.

Hutchinson, Jemmott, Jemmott, Braverman, and Fong (2003) examined the relationship between mother-daughter communication about sex and sexual risk-taking behaviors among urban young women. The authors analyzed survey data from 219 sexually active young African American and Latina women aged 12 to 19 years. Main findings from the study were similar to those of Hutchinson (2002); higher levels of

mother-daughter communication decreased the likelihood of engaging in sexual intercourse and increased condom use among young women.

Taken as a whole, all of the US-based studies highlight the important role that parents, and particularly mothers, play in relation to adolescents' sexual health knowledge, attitudes, and risk reduction behaviors. Two of the aforementioned studies focused exclusively on mother-daughter communication and had strong findings indicating that such communication leads to decreased sexual risk-taking behavior and increased protective behavior. Based on these studies, it is evident that parents, and in particular mothers, can impact daughters' knowledge, attitudes, and ultimately sexual health risk-taking behaviors.

Parent-Child Communication and Sexual Health: Kenya

Publications of interventions involving parent-child communication as a mechanism for preventing STIs, including HIV, in sub-Saharan Africa are nearly non-existent. Two published interventions that focused on parent-child communication in Kenya highlight the Nyeri Youth Health Project and the Families Matter! Program (Alford, Cheetham, & Hauser, 2005; Poulsen et al., 2010a).

The Nyeri Youth Health Project included Kenyan adolescents of both genders, aged 10 to 24 years, who lived in rural and urban areas. The program involved training young parents that were selected by participating community members on life-planning skills. Life planning skills included linking together the manner in which “knowledge and skills related to values, community, adolescent development, sexuality, gender roles, relationships, pregnancy, STIs, HIV and AIDS, harmful traditional practices, substance use, children's rights, and advocacy” (Alford, Cheetham, & Hauser, 2005, p. 13). Once

trained, the parent-leaders then worked with adolescents throughout their communities to reduce sexual risk behaviors. The parent-leaders also worked with other parents and school teachers to increase communication with youth in the community about sexual health.

Evaluations of the program included approximately 14,000 youth aged 10 to 24 years. Each project site was compared with a demographically similar comparison site. Outcomes of the evaluation indicated that the project had the effects of increasing communication about sexual health among youth, their parents, and other adults in the communities, and the results were significant only for female adolescents. In addition, the project also significantly increased abstinence among sexually experienced female adolescents and significantly reduced the number of sex partners among female adolescents that remained sexually active over a period of three years. While the intervention and evaluation findings of this project did not directly focus on the impact of biological parent-child communication, the findings did indicate that, particularly among female adolescents, increased communication about sexual health with parent-leaders tended to decrease sexual risk-taking behaviors.

The Families Matter! Program (FMP) is a program that was developed for rural Kenya. FMP is an adaptation of a US-based program called Parents Matter! (PMP). The PMP was designed for parents of adolescent children to give parents the necessary skills to help their adolescent children avoid sexual risks and develop healthy sexual behaviors. The PMP educates parents on practices that reduce sexual risk among adolescents and helps parents develop communication skills to “effectively convey their values and expectations about sexual behavior, as well as critical messages about HIV, STIs, and

pregnancy prevention, to their children prior to the onset of sexual activity” (Poulsen et al., 2010a, p. 275). Cultural adaptations were made to the PMP using feedback from local stakeholders.

Evaluations of the FMP included 375 parents and guardians of children 9 to 12 years old using a pre/post design. At one year post-intervention FMP was found to significantly increase positive parenting skills, parent-child sexual communication, and knowledge, behavior, skills, comfort, and confidence to talk about sexual issues with their children (Vandenhoudt et al., 2010). By 2009, over 45,000 families participated in FMP (Poulsen et al., 2010a).

Other Kenya-based studies that involved findings related to parent-child communication tended to be focused on investigating who youth communicate with on sexual-health matters or barriers that inhibit such communication. Toroitich-Ruto (1997), cited earlier in this chapter, included a component of the study that assessed adolescent communication. Specifically, the study assessed who adolescents of both genders communicate with about sex-related matters. Young women and men aged 15 to 19 years reported that they found parents most useful in coping with sex-related matters. Specifically, nearly three-quarters of the participants (73%) indicated that they found parents *very useful*, along with religion (73%), and health professionals (70%). Such findings indicate that in Kenya, as with the US, there is opportunity for parents to play a key role in adolescent-based interventions related to sexual health.

Another study also found that communication about sex is relatively common in Kenya, but that in-depth communication is less common. Kigaru, et al. (1996) conducted a qualitative study to ascertain the perspectives of both youth and adults on adolescent

reproductive health issues. The authors interviewed 1,476 adolescents of both genders aged 15 to 19 years and 2,894 adults aged 20 to 54 years. A main finding of the study was that less than half of the parents and adolescents reported communicating about STIs, AIDS, or sexual relationships. In addition, less than one-third had discussed abortion, contraception, or puberty. The study also found that mothers were more likely than fathers to have discussed reproductive health issues with the adolescents, again highlighting the key role of mothers in sexual communication with adolescents. Additionally, the study also found that the adolescents were most comfortable communicating with a same-sex parent. Based on these findings, the authors advocated interventions aimed at increasing parent-child communication on reproductive health issues.

Juma, Mwaniki, and Maturi (2005) used questionnaires and focus groups to assess 2,444 young women aged 10 to 15 years on the outcomes of an adolescent female peer education program aimed at HIV prevention. The study tapped into parent involvement in reproductive health communication and exposed numerous contrasts. The study found that overall, 29% of participants felt that they had no one to talk to when they needed advice. In addition, when asked whether they had talked about certain topics with their parents in the last three months, most mentioned education (88%), personal hygiene (77%), friends (64%), and HIV/AIDS in general (56 %). Less had talked with their parents about physical changes related to puberty (44%), sexually transmitted diseases (38%), and boy-girl relationships (31%). In the focus groups, participants were asked why they had difficulty discussing reproductive health issues with parents. A primary theme was that participants felt fear and embarrassment when approaching their parents

with such matters. In addition, focus group participants also indicated that they felt their parents did not want to discuss these issues with them. Moreover, some of the participants indicated additional barriers, including that they did not want to make their parents suspicious of their personal lives and that their parents were too busy. A final main theme was that participants talked more with their mothers than their fathers about reproductive health-related matters.

As with Kigaru et al. (1996), Juma, Mwaniki, and Maturi (2005) indicated that parent-child communication is relatively common in Kenya, but that in-depth communication is less common. Moreover, findings from both studies highlight the key role that Kenyan mothers play in communicating with their daughters about sexual health.

The reason that adolescents prefer communicating with mothers as opposed to fathers on reproductive and sexual health issues may in part be due to gender roles and norms. However, it may also be due to family dynamics. Specifically, according to the KDHS 2003, in Kenya nearly one-third of households are female-headed (CBS, MOH, & ORC Marco, 2004). The finding that many Kenyan households are female-headed further emphasizes the need for a focus on mothers' roles in communication with their daughters about sexual health.

Similar to Juma, Mwaniki, and Maturi (2005), Obare, Agwanda, and Magadi (2005) also assessed mother-daughter sexual health communication. The authors surveyed 1,247 Kenyan girls aged 12 to 19 years and assessed sexual communication. Participants were asked whether they discuss concerns of sexual nature with a variety of individuals (e.g., mother, father, school teacher). The authors found that younger female

adolescents preferred talking to their mothers about sexual concerns while older girls preferred to communicate with a peer or friend. Specifically, among young women aged 12 to 15 years, 53% reported talking to a girlfriend about sexual concerns and 50% talked to their mothers. In contrast, among young women aged 16 to 19 years, 56% talked to a girlfriend, and only 35% talked with their mothers. Additionally, when young women aged 12 to 15 were asked to indicate who they talked to most, they were most likely to indicate their mother (35%). In contrast, young women aged 16-19 years were most likely to indicate girlfriend (29%), followed by boyfriend (20%), then mother (19%). While Obare, Agwanda, and Magadi (2005) found that young women aged 16 to 19 years were less like to talk with their mothers than those aged 12 to 15 years, the study did not investigate why communications decreased with age.

Several studies have demonstrated that in Kenya, barriers to sexual health communication are related to the knowledge and cultural views of the mothers. Specifically, Njau and Meme (1997) conducted both focus groups and interviews with twenty Kenyan mothers and their daughters, as a first phase of an intervention project. The study included 10 Muslim mother-daughter dyads, and 10 Christian mother-daughter dyads. Daughters ranged in age from 10 to 19 years. A main finding of the study was related to incongruence between the daughters' information needs related to HIV/AIDS and what mothers provided. Despite that both mothers and daughters who participated in the study expressed desires to communicate, the communication patterns were very poor. A key finding was that many mothers did not have adequate knowledge related to STIs, including HIV. Moreover, it was found that many of the mothers who had *some* knowledge did not apply it to their own lives. Finally, it was also found that many

mothers did not believe that condoms were an appropriate STI prevention method. Based on these findings the author advocated for additional studies of Kenyan mothers and daughters to further explore and validate these findings in order to enhance future and existing interventions.

Similarly, Mbugua (2007) explored reasons that Kenyan mothers are unable to provide adequate sexual education to their daughters. The qualitative study included individual interviews with 15 mothers of girls attending high school. The author also infused her experiences in communicating with her mother, as the author grew up in Nairobi. A main finding of the study was that the vast majority of mothers (90%) had not received sex education from their own parents and thus many did not feel that they were capable of discussing sexual matters with their daughters. Moreover, the author also found that many mothers felt inhibition to discussing sexual matters because of their Christian values, and the notion that even sex-related words (e.g., menstruation, intercourse, and names of sexual organs) were not acceptable to verbalize. Instead it was found that most of the mothers assumed that their daughters received adequate reproductive health education from their textbooks. However, in focus groups held with young women aged 17 to 19 years in 1996 and 2003, the author found that this was not the case.

Taken as a whole, these studies indicate that Kenyan mothers can play a key role in decreasing their daughters' sexual risk behaviors. However, many of the aforementioned studies identified that barriers inhibiting mother-daughter communication exist. In particular, it seems that Kenyan mothers may lack education and may hold

values that prevent them from engaging in sexual health communication with their daughters.

Unfortunately, several key areas related to understanding the manner in which mother-daughter communication can decrease sexual risk behavior among young women in Kenya remain unaddressed. It seems that components of the PETPB model can guide our understanding by assessing the process of Kenyan mother-daughter communication about sexual health. Specifically, investigating a) the factors that influence mothers' attitudes and behaviors related to sexual health communication with their daughters, b) the impact of such communication on daughters' attitudes and intentions, and c) daughters' sexual risk reduction behaviors, can lead to a more comprehensive understanding of the manner in which mother-daughter communication about sexual health facilitates decreased sexual risk behaviors among young women in Kenya.

Rationale

This study was designed to explore the manner in which sexual health communication among female primary care-givers (*mothers*) and adolescent females aged 15 to 19 years (*daughters*) was related to sexual risk reduction behaviors among adolescent females in rural Kenya. Kenya is a country with a high prevalence of HIV and AIDS (CBS, MOH, & ORC Marco, 2004; UNGASS, 2006). Research has demonstrated that young women aged 15 to 19 years are particularly vulnerable to HIV/AIDS. Specifically, young women tend to experience a high prevalence of HIV/AIDS, coupled with low levels of HIV risk reduction knowledge and high levels of sexual-risk behaviors (CBS, MOH, & ORC Marco, 2004; MOH, 2005b; MOH, 2009). In addition, research indicates that rural women tend to be disadvantaged when it comes to

HIV knowledge, and tend to engage in sexual risk-related behavior more frequently than urban women (CBS, MOH, & ORC Marco, 2004; Voeton et al., 2004).

As with HIV/AIDS findings, research also indicates that young women in Kenya have a high prevalence of STIs (CBS, MOH, & ORC Marco, 2004; MOH, 2009), and that their levels of knowledge and preventive behaviors are low (Ajayi, 1991). Recently there has been a call to incorporate HIV/AIDS efforts with reproductive health efforts (Coggins & Senegal, 1998; WHO, 2007) and studies have demonstrated that the need to do so is particularly pressing in Kenya (Askew & Bererib, 2003).

There has also been a call in the US to include parents in youth-based sexual health interventions, as US-based studies tend to indicate that parent-child communication, particularly maternal communication, on sexual matters decreases sexual risk (Carabassi, Greene, & Bernt, 1992; Miller et al., 1998; Dutra, Miller, & Forehand, 1999; Kotchick et al., 1999; Dittus, Jaccard, & Gordon, 1999; Karofsky, Zeng, & Kosorok, 2000; Hutchinson, 2002; Hutchinson et al., 2003). With regard to Kenya, there is sparse evidence that parent-child communication directly facilitates such decreases (Alford, Cheetham, & Hauser, 2005; Poulsen et al., 2010a). However, there is evidence that both parents and youth value communication about sexual health (Toroitich-Ruto, 1997). Studies have also indicated that such communication is not common among older adolescents and their parents (Kigaru et al., 1996; Juma, Mwaniki, & Maturi, 2005; Obare, Agwanda, & Magadi, 2005). Moreover, several studies have uncovered barriers related to such communication, including discomfort (Juma, Mwaniki, & Maturi, 2005), low levels of sexual knowledge (Njau & Meme, 1997), and religious and cultural values among mothers (Mbugua, 2007).

To explore the role of mother-daughter communication about sexual health, and its relation to sexual risk behaviors among young women, this study utilized the PETPB model. The PETPB takes into consideration the influence of parent communication when assessing adolescent sexual risk behavior (Hutchinson & Wood, 2007a). Two studies have used the PETPB framework. One US-based study found that communication among mothers and daughters influences sexual behaviors (Hutchinson et al., 2003). The other study found that Jamaican mothers had a key influence on youths' preventive behaviors. However, the PETPB has yet to be investigated elsewhere. Thus, this study utilized the PETPB framework to inform the development of research questions.

In summary, the aim of the present study was to explore communication and knowledge of sexual health among mothers and daughters to better understand the impact of mother-daughter communication on daughters' sexual risk behaviors. For the purpose of this study communication is defined within the constitutive metamodel communications theory framework. Based on this framework, communication is not merely a linear transmission process (e.g., message-receiver), but a "social process through which our meaningful common world is constructed" (Craig, 2007, p. 127).

Research Questions

Five research questions were developed, influenced by the PETPB. The initial two research questions assessed who daughters communicate with about sexuality and sexual health. Both were developed to better understand influences on daughters' normative beliefs about sexuality and sexual health. The third research question explored the context in which mothers and daughters communicate about sexual health. This question was developed to better understand the manner in which mother-daughter

communication influences daughters' beliefs about sexuality and sexual health and sexual risk reduction behaviors. The fourth research question assesses both mothers' and daughters' sexual health knowledge to get an understanding of additional external factors that influence their knowledge and understanding of sexual health. Such factors may also influence beliefs and intentions related to sexual risk behavior. Finally, the fifth research question assesses daughters' sexual risk reduction behaviors to understand the impact of mother-daughter communication about sexual health on daughters' sexual risk reduction behaviors.

1. Who do daughters communicate with about sexuality?
 2. Who do daughters communicate with about sexual health issues?
 3. How do mothers and daughters communicate about sexual health?
 4. What do mothers and daughters know about sexual health?
 5. What are daughters' sexual risk reduction behaviors?
- .

CHAPTER II

METHOD

The purpose of this project was to better understand mother-daughter communication about sexual health in rural Kenya and its role in sexual risk reduction. This project included in-depth interviews with young women who were daughters aged 15 to 19 years and their mothers in order to better understand both mothers' and daughters' experiences related to sexual health knowledge, communication, and sexual risk reduction behaviors in rural Kenya.

Qualitative research was chosen because the approach emphasizes the socially constructed nature of reality, in contrast to quantitative research that tends to examine the causal relationship between variables (Denzin & Lincoln, 2000). With regard to this study, qualitative research was necessary because of the exploratory nature of the phenomenon under investigation and also because of the cross-cultural nature of the research. Qualitative interviews were chosen as a culturally appropriate method because of the ability to collect culturally anchored information—wherein information from the interviews is anchored in participants' worldviews (Keys, McMahon, Sanchez, London, & Abdul-Adil, 2004). As is typical with qualitative methods, this study utilized open-ended questions as a mechanism to understand participants' experiences. According to Patton (2002), open-ended questions allow “one to understand the world as seen by the respondents” (p. 21).

This study took place in Thigio, Limuru, Kenya, an impoverished rural town with a surrounding population of about 4,000 residents (Bingmann, 2007). Thigio was an ideal location for the study, because it is reflective of majority demographics in Kenya.

Most of Kenya is rural (CBS, MOH, & ORC Marco, 2004), and residents of Thigio tend to be Kikuyu, the most common ethnic group in Kenya (CBS, MOH, & ORC Marco, 2004). In addition, the economic disadvantage of Thigio is common throughout the country of Kenya, where the majority of citizens live below the national income poverty level (United Nations Development Program, 2005).

This study also involved collaboration with the Daughters of Charity (DOC) in Thigio, who assisted in the recruitment of participants. The DOC are an international community of nuns, with more than 19,000 women in 90 countries. The DOC mission is to strive “to serve Jesus by serving persons who are poor and marginalized” and the organization has a strong social justice emphasis (DOC, 2009). In 2002, the DOC began their Vincentian mission work in Thigio, and in 2004 began focusing on human immunodeficiency virus (HIV) prevention for youth and young adults. The DOC provide a diverse array of services for little or no cost to the community in Thigio area. For instance, the DOC provide training and education, assistance to the poor, health care, and hospice to the Thigio community.

Research Participants

Participants in this study included 19 mother-daughter dyads. Specifically, 19 daughters and 19 mothers were included in this study, for a total of 38 participants. A sample size of 38 participants was viewed as acceptable as it allows for saturation, a point wherein no new themes emerge from the data. Saturation indicates the boundaries of a phenomenon have been met (National Institute of Health, 1999). In contrast to quantitative research, sample sizes in qualitative research depend upon the purpose of the inquiry rather than efforts to obtain significant effects (Patton, 2002). With regard to this

study, objectives included obtaining rich perspectives based on open-ended interview questions that tap into the experiences of communication about sexual health between mothers and daughters.

The participant selection was a purposive criterion sample, wherein both mothers and daughters had to meet specific criteria to participate in the study. *Daughters* included female adolescents between the ages of 15 to 19 years that resided in Thigio or the surrounding area and were fluent in spoken English. Female adolescents aged 15 to 19 were chosen to participate because they are of secondary school-age (equivalent of US high school), and mature enough to share their experiences related to knowledge, communication, and behaviors related to sexual health. The average age of daughters was 17 years. *Mothers* included those who were biological mothers or female primary caregivers for the female adolescent, who resided with the female adolescent, and were fluent in spoken English. Six of the mothers were non-biological and included three older sisters, two aunts, and one cousin.

Procedure

Staff from the DOC assisted in the recruitment of research participants by posting informational flyers in community spaces (Appendix A). The flyers gave information about a reception with the principal investigator wherein mothers that were interested could ask questions about the study and sign up for interview timeslots if eligible. Twenty five two-hour timeslots were available over a series of nine days and the number of available timeslots varied from one to four per day. Participants were recruited until all timeslots were filled to ensure that approximately 20 dyads participated in interviews.

During the process of determining eligibility for the study, the principal investigator followed a specific script and used a preformatted recruitment sheet (Appendices B & C).

Interviews were conducted at the Holy Cross Dispensary, a clinic that was chosen for location and facilities. Specifically, the site is well known within the Thigio community and has private rooms that typically serve HIV-related counseling needs. When a mother-daughter dyad arrived for an interview session at the Holy Cross Dispensary, they were first taken to a waiting room and informed of the interview and consent process. Next, the mother completed a consent form that also gave her permission for her daughter to participate (Appendix D). The daughter also completed an assent form indicating her willingness to participate (Appendix E).

Importantly, a measure was taken prior to commencing the interview to insure that language and cultural differences did not impact the consent and interview process. Specifically, prior to signing the consent forms, the principle investigator assessed participants' knowledge by asking them questions about the study's main purposes and consent process. Once consent signatures were obtained, the interviews commenced.

First, the mother was taken to a counseling room to participate in her individual interview (Appendix F). Once the mother participated in her interview, the daughter was taken to the counseling room to participate in her individual interview (Appendix G). Each individual interview lasted up to one hour, for a total commitment of approximately two hours for each mother-daughter dyad.

The interviews were audio-recorded and no personally identifying information was collected during the interview. Interview questions assessed 1) who daughters talk to about sexuality, 2) who daughters talk with about sexual health issues, 3) how mothers

and daughters communicate about sexuality and sexual health, 4) both mothers and daughters' knowledge related to sexual health issues, and 5) daughters' sexual risk reduction behaviors. At the end of the interview process, each participating dyad received a small food basket, containing essential cooking items, as compensation for their time and effort.

Instruments

During the individual interview daughters and mothers were asked questions using two separate interview guides. Daughters were asked five main open-ended questions, while mothers were asked three main open-ended questions (see Appendices F and G, respectively). Content of both the mother and daughter interview guides were informed by the PETBP model, along with narrative and phenomenological frameworks. In addition, the interview guide questions were also enhanced based on feedback from a communications expert with experience working in rural Kenya and both interview guides were piloted on a Caucasian mother-daughter dyad in the US.

Interview questions were developed by the principal investigator based on prior literature and the PETPB model. The PETPB model first investigates the manner in which external influences on mothers' motivations impact their own beliefs and intentions. The mothers' beliefs and intentions are then said to influence their daughters' beliefs and intentions, and are believed to ultimately impact their daughters' sexual behaviors. With regard to the present study, mothers' beliefs and intentions were assessed by asking about their knowledge of sexual health, and their communication experiences related to sexuality and sexual health with their daughters. Next, daughters' beliefs and intentions were assessed by asking who they communicate with in general

about sexuality and sexual health, about their knowledge of sexual health, and about their sexual health communication experiences with their mothers. In addition, daughters' sexual risk reduction behaviors were assessed by asking about how they protect their sexual health. At the end of each interview both mothers and daughters were asked a final closing question, to provide participants with a final opportunity to give input. Additional open-ended sub-questions were asked to probe participants for additional information as necessary. Once the interview concluded, each participant was assessed on their level of discomfort related to participating in the interview. Although no participants indicated distress, an on-site psychiatric nurse was available for assistance.

Interview questions were also informed by narrative analysis and phenomenological frameworks. A narrative analysis approach was chosen to elicit "stories" from participants. Narrative analysis is an interdisciplinary approach often recommended for cross-cultural research. In fact, the World Health Organization Adolescent Development Programme advocates narratives as a method for obtaining information to inform interventions geared at adolescent sexual health in developing countries (Turner, 1994). Moreover, Narrative Paradigm, a communications theory, posits that all meaningful communication is a form of storytelling. Thus, individuals experience and comprehend life as a series of ongoing narratives with unique conflicts, characters, beginnings, middles, and ends (Fisher, 1985).

In using a narrative analysis approach, participants are asked to share stories to ascertain information about individual accounts of lived experiences. For instance, with regard to the present study, daughters were asked to tell a story about a time they talked with their mother about sexuality. According to Reissman (1993), the narrative analysis

approach allows for participants to share “a recapitulation of every nuance of a moment that had special meaning” (p. 2).

In addition, a phenomenological approach was chosen to understand commonalities among mothers and commonalities among daughters related to their sexual health communication experiences. For instance, both mothers and daughters were asked to share what they knew about sexual health. By combining narrative and phenomenological frameworks, information about individual as well as shared experiences can emerge, allowing for a holistic understanding of mother-daughter communication about sexual health.

CHAPTER III

ANALYSIS AND RESULTS

This study involved analysis and interpretation of the experiences of rural Kenyan mothers and daughters communicating about sexual health and assessed knowledge related to sexual health and sexual risk reduction behaviors. This chapter includes information on the analysis of the present study to allow for a comprehensive understanding of results that correspond to the analysis procedures. First, each component of analysis is described, and then results of the cross-case and comparative analyses are presented.

Analysis

Within this study, qualitative interviews were used to assess the experiences of mothers and daughters. Analysis of the interviews involved four main components. Specifically, the study involved: 1) bracketing experiences, 2) a coding procedure, 3) cross-case and comparative analysis, and 4) credibility assessments. In this section, each component of analysis is described and related to the present study.

Bracketing Experiences

Prior to collecting data for the present study, I (the principal investigator) engaged in the process of bracketing. According to Patton (2002), a main component of phenomenological research involves an acknowledgement of the *essence* of shared experience. Thus, it is important for a researcher to bracket experiences related to the phenomenon under investigation. By engaging in this process, I worked to identify my relationship with the phenomenon under investigation, so as to diminish potential

assumptions and biases that could have impacted data collection and interpretation of emergent findings (Beck, Keddy, & Cohen, 1994).

To engage in the bracketing process, I initially asked myself why I was drawn to the present study. I am a 30 year old female that identifies as Caucasian. Despite identifying primarily as Caucasian, I also retain a strong ethnic lineage. My mother is a first generation Norwegian-American. My father is of Mexican and Bulgarian descent and identifies as a Mexican-American. Thus, I feel that I have grown up in an environment that inspired a nuanced view and a fascination with ethnicity and culture. Moreover, I have worked on various sexual health-related prevention projects for about five years and feel both passionate and committed to that line of work.

With regard to the present study, there are three central issues that could potentially have impacted the data collection and analysis of findings. These issues include a) being from an outside culture, b) being non-religious, and c) my prior experience with human immunodeficiency virus and/or acquired immune deficiency syndrome (HIV/AIDS) and other sexually transmitted infections (STIs). Each of these issues will be discussed in the following paragraphs.

First, as a young highly educated Caucasian woman from the United States, I am aware that my own worldviews and the community's perceptions of me likely had an influence on my reception in Thigio and responses to the present study. That said, prior to the study, I worked to familiarize myself with the Kenyan culture of the Thigio community. Initially, I volunteered on a research project that involved collaboration with Kenyan partners. I also volunteered for over a year and a half on a project that worked extensively with the Thigio community on HIV prevention. Additionally, I transcribed

nine focus groups held with Kenyan youth regarding sexual health, including youth from the Thigio community. Five of the focus groups were conducted with female adolescents.

Second, I am non-religious but collaborated and resided with the Daughters of Charity, a Catholic organization comprised of nuns. Even though I identify as non-religious, I was brought up in a Catholic family and did attend Catholic Church throughout my early childhood. In addition, my experience as a student at DePaul University, and more so my experiences conducting institutional research for DePaul's Office of Mission and Values, enhanced my understanding of Catholicism and Vincentianism.

Third, prior to data collection, my experience related to STIs, including HIV, primarily took place within academic and clinical settings. On a personal level, I have also had some experiences with HIV and other STIs. Shortly after high school I experienced losing a friend to AIDS-related illness. Moreover, throughout my undergraduate college experience I worked both at a rehabilitation facility for juvenile offenders dually diagnosed with substance abuse and mental health disorders and at a juvenile detention facility. At both facilities, I worked with nurses that regularly conducted STI tests and I was often called in to assist in counseling young women infected with STIs. During that period I formed a close relationship with a female detainee who had recently contracted HIV.

Each of these experiences greatly shaped who I am and, likely, each element of this study. As previously mentioned, this study involved *shared experience*. As the principal investigator, I operated as a developer, a data collector, and an analyst. I also

operated as an instrument of the study, as my background likely influenced all aspects of the study.

Coding Procedure

To engage in the coding procedure, each audio-recorded interview recording was initially transcribed verbatim and then all interviews were systematically coded. NVivo 8 qualitative software (QSR NUD*IST Vivo software, Qualitative Solutions & Research) was used to organize the data. Throughout each of these phases, both narrative and phenomenological analysis approaches were utilized.

Goals of narrative analyses include determining what a narrative, or story, reveals about an individual and the culture from which the narrative came (Patton, 2002). With regard to the present study, narrative analysis was central to understanding mother and daughter stories about their communication experiences, and daughters' stories about sexual health preventive behaviors. Narrative analysis was used to analyze entire transcriptions, including responses to specific questions that were designed to elicit a narrative response. For instance, with regard to mothers' interviews, one interview question asked the participant to share a story about a time she talked with her daughter about sexuality (see Section I, Appendix F). In addition, mothers were also asked to share a story about a time they talked with her daughter about sexual health (Section II, Appendix F). Interpretations of the narratives were guided using the narrative analysis framework to identify common themes and patterns among mothers' stories that speak to the broader culture among mothers in rural Kenya.

Phenomenological analysis can be used to understand "the structure and essence of the lived experience" of a phenomenon for an individual or a group of people (Patton,

2002, pg. 104). In contrast to narrative analysis, which focuses on understanding the individual experiences that speak to an overall culture, phenomenology focuses more on shared meaning and the way in which individuals experience a phenomenon. In the case of this study, the phenomenological framework was utilized to analyze entire transcriptions, including segments of the interviews that relate to who the daughters communicate with, in general, about sexuality and sexual health, and mothers' and daughters' knowledge related to sexuality and sexual health.

The coding procedure employed five main phases, including a) a transcribing process, b) initial coding, c) thematic coding, d) coding refinement, e) codebook construction (Miles & Huberman, 1994). Each of these processes will be described in the paragraphs that follow.

First, as recommended in Riessman (1993) for narrative analysis, the principal investigator engaged in the transcribing process along with a team of trained research assistants. Once all of the interviews were transcribed, each transcription was validated by having a research team member that did not transcribe the specific interview review the audio-recording while reading the interview transcription.

Once the transcription process was completed, the principal investigator began coding the transcriptions. During the process of coding, the principal investigator identified ideas and concepts related to each of the research questions. The coding continued until the principal investigator could no longer identify novel concepts related to the components of the research questions (Miles & Huberman, 1994).

Next, the principal investigator engaged in a thematic analysis. The objectives of the thematic analysis were to elucidate main themes that emerged during the coding

procedure. For instance, each time a daughter talked about why her conversation about sexual health commenced, the theme was coded as DR3C-Why, to indicate this theme was related to why the communication about sexual health began.

A final step in the coding process involved coding refinement to identify subsets of codes related to the themes that were identified during the thematic coding. For instance, with regard to the thematic code “DR3C-Why,” a sub-code “DR3C-Why-relM” was used to delineate instances where the daughter reported that the conversation with her mother began because of her relationship with a male. This process was repeated until all relevant sub-themes that occurred in the data were represented (Miles & Huberman, 1994).

Once the coding refinement process was completed, the principal investigator created a codebook that listed all of the thematic codes along with descriptions of each code. Next, members of the research team were trained by practicing coding with the principal investigator and then monitored while reviewing each transcription independently and assigning thematic codes.

Inter-rater reliability was assessed as part of the research assistant training and monitoring of the thematic coding. During this process, two research team members independently coded the transcriptions and compared their codes until a 90% agreement of codes was achieved. Throughout this process, all discrepancies in coding that arose were presented in research team meetings and discussed until all inconsistencies in coding were resolved. Thereafter, every fifth transcription was selected for additional reliability assessment to ensure that “coder drift” (a form of coder fatigue due to analysis of large datasets) was addressed. During the initial reliability assessments, 90% inter-

rater reliability was achieved, and was maintained thereafter. Had reliability fallen below 90% at any time, the reliability process would have started again until 90% inter-rater reliability was again achieved.

Cross-Case and Comparative Analysis

Cross-case analyses were used to compare thematic codes. According to Miles and Huberman (1994), a fundamental reason to use cross-case analysis is to deepen understanding and explanation of a phenomenon. Employing a cross-case analysis approach allows for an understanding of the uniqueness of each individual experience, but also allows for a more general understanding of processes that occur across cases. Cross-case analyses also allow for enhanced generalizability (Miles & Huberman, 1994). Specifically, making comparisons among cases allows for a determination of whether findings are typical beyond a specific case.

With regard to the present study, meta-matrices were used to organize thematic codes and compare cases. Importantly, when reviewing “cases” a researcher is not interested in individual codes, but recurrent patterns among codes and matrices allow researchers to visualize the patterns (Miles & Huberman, 1994). Both daughters’ and mothers’ cases were compared to understand commonalities in their experiences related to communicating about sexual health. Specifically, all individual themes for each daughter were compared across all daughters’ cases to determine whether her experiences were common among other daughters. Mothers’ cases were compared in the same manner. Next, comparisons were made between mothers and daughters, using a comparative analysis approach (Miles & Huberman, 1994). During the comparative analysis, main patterns and themes from both the daughter and mother cross-case

analyses were compared. The comparative analysis allowed for an understanding of how daughters' and mothers' communication experiences and knowledge of sexual health related to another.

Credibility

Credibility involves establishing that results of qualitative research are relevant from the perspective of the research participants (Lincoln & Guba, 1985). Two main processes were used in the present study to enhance credibility. Specifically, post-interview forms of member checking and peer debriefing were used to enhance credibility in the present study.

First, a post-interview form of member checking was used to overcome potential misunderstandings related to language differences and differing cultural norms and values inherent in cross-cultural research (Patton, 2002). Member checking is a process that allows participants to verify data and interpretations of data, to minimize bias (Lincoln & Guba, 1985). Although a typical form of member checking involves the opportunity for participants to review their personal transcriptions and inferences related to the transcriptions, this was not feasible in the present study.

During the present study, the principal investigator reviewed notes from each interview with each participant to ensure that interpretations of participants' experiences are as accurate as possible. Specifically, after each participant had answered all of the interview questions, the principal investigator read notes taken during the interview aloud to the participant, to give the participant the opportunity to clarify misinterpretations. Next, in June 2010, the principal investigator returned to Thigio, Kenya, to disseminate primary findings from the study. A meeting was held with eleven available women that

had participated in the original study. During the meeting, a fact sheet available in English and in Kikuyu (translated by researchers from the University of Nairobi) was read out loud and interpretations of the findings were discussed.

The principal investigator also engaged in peer debriefing in an effort to overcome potential researcher biases related to the key elements of the present study. Periodically, throughout the study, the principal investigator communicated information related to the present study's methodology, data, and results to a peer that had no other relationship with the study (Lincoln & Guba, 1985). The main rationale for utilizing the peer debriefing method was to help to identify, and thus minimize, potential biases related to the principal investigator being submerged in the data.

Results

The results of this study are organized into three sections. The first and second sections consist of the daughter and mother cross-case analysis results. The third section consists of results from the comparative analysis of mother and daughter interviews and utilizes a comparative analysis table.

In both daughter and mother cross-case analysis sections, pseudonyms are used when referencing participants' quotes. Pseudonyms were chosen based on observations made during data collection. Participants had both tribal (typically Kikuyu) and Christian names. Furthermore, it was observed that most daughters favored traditional Christian names whereas most mothers favored traditional Kikuyu names. Therefore the pseudonyms assigned to daughters are primarily Christian names, whereas those assigned to mothers are primarily Kikuyu names.

Daughter Cross-Case Analysis Results

The daughter cross-case analysis results are organized into five sections based on themes and patterns that emerged during cross-case analyses. The first four sections include: 1) daughter communication about sexuality, 2) mother-daughter communication about sexual health, 3) sexual health knowledge, and 4) daughters' sexual risk reduction methods. These sections are reflective of the research questions of the study. The final section, 5) cultural and religious influences, emerged during the analysis procedures. Each of these sections will be expounded on, and will include a discussion of themes and sub-themes.

Daughter Communication about Sexuality

During interviews, daughters were asked both about who they communicate with about sexuality and who they communicate with about sexual health. In their responses, daughters did not distinctly distinguish between communication about sexuality and sexual health. For instance, when asked about both sexuality and sexual health, some daughters mentioned talking about HIV prevention with others. Thus, research questions regarding who daughters communicate with about sexuality and sexual health were collapsed into one research question, and the following results speak to communication about sexuality in general. As previously stated, for the purposes of this study, sexuality is said to be “a central aspect of being human throughout life and encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction” (World Health Organization, 2005).

With regard to who daughters communicate with about sexuality, a main finding was that all of the daughters had talked with someone about sexuality, and many spoke to

a myriad of people. Daughters reported discussing sexuality with their a) mothers, b) other family members, c) friends and peers, d) their romantic partners, and e) adult professionals. Each of these themes will be detailed in the following sections.

Mothers.

Nearly all daughters reported speaking to their mothers about sexuality, and particularly about HIV/AIDS, as Iris shared. Several also explained that their mothers talked to them about how to live a morally “good” or “decent” life by abstaining from sex, as Mercy and Jane mentioned.

D: Okay, she's a good mom...She usually tells us about AIDS. (Iris, 17 years)

D: And she (mother) tells me about HIV/AIDS. She gave me a lot of advice so that I can live life good. (Mercy, 18 years)

D: She (mother) normally assists me by giving me books, or even buying for me books. And she encourages me to keep on working hard, to continue being educated. And also she normally advises me to carry myself well in a very decent manner and also to abstain from safe sex before marriage. (Jane, 18 years)

Other family members.

Daughters also talked to family members other than their mother about sexuality. Many talked to their similar aged relatives (brothers, sisters, nieces, nephews), at times giving advice. For instance, Mercy shared that she advised her younger sister on avoiding men and pursuing her goals.

D: I talk with my sister. She is in Standard Seven. I tried to tell her to stop about them, she's very small. I tell her to, not to go with those men, those boys, who are [giving] those prizes. You know these days people are they are cheating (having sex), so I tell her to be very careful...We are looking for her to achieve her goals, and after that, to take her to the secondary school. So I try to get my own rules, so that she can go higher. (Mercy, 18 years)

To a lesser extent, daughters mentioned talking with older family members (grandmothers, aunts, uncles) about sexuality, as Moriah indicated.

D: I can also talk to the big people like my mom or my aunt. (Moriah, 16 years)

Friends and peers.

All daughters reported speaking with friends and peers about sexuality. Most talked with both males and females, as Mercy indicated. Many also highlighted that they felt comfortable talking with other youth in public settings. Daughters spoke of talking to friends and peers at school and in church, as exemplified by Bethany and Mary.

D: Yes and I talk with them. And I tell them to talk with the other boys and girls. Yes. (Mercy, 18 years)

D: Those [students] that I go to school with, a group of peoples, who start discussing [sexuality]. (Bethany, 15 years)

D: ...Maybe when I come to church with the other youth, we usually talk about these things. (Mary, 18 years)

Daughters also indicated that they were passionate about educating other youth. As previously mentioned, many daughters shared information with younger siblings. Many daughters also spoke of educating other friends and peers, particularly those they felt were at risk. Mercy shared a story about trying to persuade another young woman to engage in less risky behaviors. Theresa spoke of her role as a Peer Educator.

D: When I see a girl, a very small girl, cheating (having sex) with the other... I tell her, "Look, this man he have got a woman, he has got children. Look at the man. Look at your future. What did you think?" And from there, I talk with her and we talk a lot and she stops that thing. So I try in every way to stop people to be in lust, because you see how it's spreading in countries like Africa. So we try, I try all the best to my friends and my relatives, my niece, to stop the AIDS. (Mercy, 18 years)

D: I was a Peer Educator and I would talk about HIV and sexually transmitted infection. [A teacher] told me never to have sex until you're married. And I told [the peers] to abstain. (Theresa, 15 years)

Most daughters spoke of their positive experiences in sharing or exchanging information about sexuality with their peers. That said, several daughters also mentioned

peer pressure to engage in sexual activity. For example, Moriah discussed the conflicting messages about sex from her peers versus her ethnic tribe.

D: Some of my friends say that [sex] is good. But the tribe says it is something that is not actually good until you are married. (Moriah, 16 years)

Romantic partners.

Many daughters reported that they talked to their boyfriends about sexuality. In most cases daughters mentioned that their boyfriends tended to pressure them to engage in sexual activity during these conversations, as Tamara shared. In contrast, one participant (Hannah) shared that her boyfriend helped her to abstain from sex.

D: Okay, now that boyfriend I was with him for about two months. Then he told me that he wanted us to talk about playing sex. Now we went and then he wanted us to have sex. I told him we are not ready. You know, now we in danger—STIs and HIV/AIDS. (Tamara, 19 years)

D: So sometimes, if I am not such a strong believer and he is, sometimes when I am in the situation—sometimes I would want to do something that would make him [uncomfortable]—he speaks. Like last time we had sex he really felt bad, making a mistake. I wouldn't want him to keep on going through that. I would like to be responsible. (Hannah, 19 years)

Adult professionals.

To a small extent, daughters mentioned talking to adult professionals about sexuality. For instance, Jane mentioned that she tends to turn to her teacher for advice on sexuality. Grace mentioned that she had spoke with doctors about sexual health and that they advised her to abstain.

D: Even if I find myself in a difficult situation, I normally go to look for assistance to a teacher. (Jane, 18 years)

F: You've learned from doctors? What do they tell you?

D: They tell me not to have sex. (Grace, 15 years)

Mother-Daughter Communication about Sexual Health

Daughters were asked to share a story about a time they talked with their mother about sexual health. Only two daughters did not feel comfortable sharing stories. In most cases, daughters shared full narratives about their experiences talking with their mothers. This subsection is divided among narrative components, including a) start of the conversation, b) content of the conversation, c) end of the conversation, d) conversation facilitators, and e) conversation barriers. Within each component, various themes and sub-themes are discussed.

Start of the conversation.

In describing the start of a conversation, daughters spoke of both themselves and their mothers beginning the talk. One overarching theme was that conversations were typically instigated by a strong catalyst. Another theme indicated that, to a lesser extent, conversations were prompted by knowledge seeking. Both of these themes will be elaborated upon throughout this section.

Strong catalyst

With regard to conversations that started because of strong catalyst, four sub-themes emerged related to the type of catalyst. Sub-themes included i) rape-related incidents, ii) problems with romantic partners, iii) sexual health concerns, and iv) sexual risk-taking behaviors. In nearly all cases, the daughters indicated that their mothers were open and did their best to assist them.

Rape related incidents: Both Ada and Tamara shared stories related to rape. Ada shared a story about a time she was threatened by a man and her mother responded by encouraging her to abstain from sex. Tamara talked about how she was approached by a

young woman that had been raped and how she brought her to her mother. She also elaborated that girls in her community were afraid to report rapes. Both cases seem to indicate that there is little recourse in their community when rapes are threatened or carried out.

D: When I talked with my mother? It was one evening, when I went out. My mom said to me to go to shop. My younger sister she is very small so that she can't go to shop at night. It was about seven at night. Now I was sent to go to shop, then I came back. When I was on my way back to home I met with one boy and the thing he told me is that one day he will rape me... I narrated the whole story to mom, but what mom told me [was] that I should abstain. I should say no to sex, because through sex I would be affected—I would get attacked with diseases. (Ada, 19 years)

D: Okay. Well, one day I met that girl. That girl, her situation was she was raped. She was raped by a stranger. Now when we were talking, the girl was in so much trouble and she was afraid to tell because she did not want to bring [it] home. She came to me, that, you know, "I am afraid." I went to my mother and told her the story. Then, my mother told me to come and we had a talk... You know that there has still been some times that the girls are afraid to report those problems. And now I was scared to go alone. My mother told me that I have changed. Now she asked me, "What is the problem?" Then I told her about the girls. She told me, and she advised me, and then now I just feel afraid to go home alone. (Tamara, 19 years)

Problems with romantic partners: Several daughters recalled their conversations starting because of problems with their romantic partners. As previously mentioned, many daughters felt concerned because their boyfriends were pressuring them to have sex. Shalisa and Moriah both shared stories of turning to their mothers because of these types of concerns. Ada recalled that she generally turned to her mother anytime she had a problem with her boyfriend.

D: Okay, there was this time I had a boyfriend. My boyfriend tried to tell me [we would] get involved in sex. I just went and asked my sister (non-biological mother). That was the right thing to do. She told me that, that if that boyfriend loved me, he couldn't have asked me to get involved in sex when we are so young. We just called it quits and I just got a new boyfriend. (Shalisa, 18 years)

D: [My boyfriend] and I were talking about something else, and then about [sex]...He told me that he liked me. He liked me more than another. He told me he would like to have sex. It affected me to imagine that, [and so] I went to my mother and asked her about that. She told me it's better to wait until you are married. If he loves me he can wait. (Moriah, 16 years)

D: I ask [my mother] questions. Any issue with my boyfriend, if we have any problems. To me my boyfriend is very close to my mom. (Ada, 19 years)

Sexual health concerns: To a lesser extent, daughters turned to their mothers because they had concerns about their sexual health. For instance, Hannah came to her mother because she was concerned that she had contracted an STI. Hannah's mother helped to alleviate her concerns and encouraged her to come to her anytime she had a problem.

D: She told me about the periods, no big deal really because I skipped (telling her) the part when I started. She was a bit more worried about me being so worried about being sick. And she was asking what makes me think that I'm sick. Have I done something that makes me afraid that I might have contracted something? And I haven't. I don't know if [it was] paranoia [laughter]...But, I haven't...She asked me if I had had sex and I told her, "No." And she said that it is nothing to worry about, I should just really stop worrying about nothing. She told me I didn't do anything that makes me so afraid...but if there really was a problem I should [talk with her]. (Hannah, 19 years)

Sexual risk-taking behaviors: Several daughters indicated that their mothers began conversations because they felt that daughters were behaving in a manner that put them at risk for sexual health problems. Mercy recalled her older cousin (non-biological mother) confronting her about coming home late in the evening, concerned that she might be engaging in dangerous behavior. Patricia recalled her older sister (non-biological mother) coming to her because she was concerned with her relationship with a young man.

D: I go and after that I came in the evening, with darkness. She sees that I am becoming very bad...so, she tried everyday to make me good. On that day she kept me. She took me [to] her place. We go in her room and we start talking to

each other face-to-face. She helped me a lot and for that day I changed my life and I became a very good girl. And for that thing, we became, she helped me and I never will forget her. So, I'm making her very happy. (Mercy, 18 years)

D: Ok. I can recall it was in the evening hours, when I reached her home...In fact a boy had escorted me to her home. When we reached her home, the boy went home. Then I was left in her home...What happened was that she started counseling me about the boy. She told me all good things about him and all bad things about him. This is where we had a talk about sex problems. (Patricia, 18 years)

Knowledge seeking

With regard to conversations that began because of knowledge seeking, it is important to note that few conversations began in this manner. In contrast to other stories, Bethany recalled her conversation beginning because her Aunt (non-biological mother) was interested in her role as a peer educator at her school. Clare was one of the only participants that reported starting a conversation because she had general questions about sexuality.

D: When were at school, where was a group that we called "peer educators." We were teaching other students at school, when you teach by teacher. My aunt (non-biological mother) asked what we had learned. (Bethany, 15 years)

D: When I was younger I was able to ask what is HIV and about sexual intercourse. (Clare, 15 years)

Content of conversation.

With regard to the content of conversations, main themes indicated that content included a) messages and b) advice that mothers shared. Messages were main points related to sexual health. Advice was specific recommendations corresponding to messages given during the sexual health discussion. Each of these themes will be discussed in this section.

Messages

With regard to messages that mothers conveyed, sub-themes were related to the risks of HIV and to a lesser extent unintended pregnancy. In most cases these messages seemed to be mentioned to discourage sexual activity, as exemplified by Clare and Patricia.

D: She told me that sexual intercourse was real dangerous and [about] AIDS and HIV. (Clare, 15 years)

D: She told me that. I have not had sex with a boy. It is very harmful and how maybe he [will] make me pregnant and then after while lose me or can transmit a disease to me.

(Later in interview)

D:...she has told me about infections, the negative ones. In fact in the talks, I have not heard of any positive things that she had taught me about sex before marriage. (Patricia, 18 years)

It is important to note that several daughters mentioned that their conversations solely focused on HIV/AIDS and were not in-depth. Both Hannah and Theresa indicated that their mothers had not talked to them about anything beyond the risks of HIV/AIDS.

D: Well, not too much. We seem to talk about sexual health, not really that much. But she's told me about HIV/AIDS, how it is transmitted, how you should be very careful with what you do. Be responsible. But not really that much. We haven't really had a conversation about sexual health. She provides the literature but not so much the talking about it. (Hannah, 19 years)

D: She told me about AIDS, and nothing else. (Theresa, 15 years)

Advice

In relation to messages about the risks of HIV and pregnancy, mothers offered their daughters several recommendations. Advice typically included suggestions of methods to reduce daughters' sexual health risks. Specifically, sub-themes included advice on i) abstinence, ii) ongoing communication, and iii) HIV testing.

Abstinence: The most salient sub-theme was advising abstinence from sexual activity until marriage. Nearly every daughter spoke of her mother encouraging abstinence. Furthermore, many daughters indicated that advice on abstinence tended to take a moral tone, denoting abstinence as “good” and premarital sex as “bad” behavior, as mentioned by Mary, Ester, and Iris. It is important to note that the moral tone of advice related to abstinence seemed to reflect sex-negative approaches to sexuality, wherein sexuality is pathologized and discouraged. In contrast, sex-positive approaches tend to encourage a forum of open discourse on sexuality, along with various risk-reduction strategies.

D: She usually talk about the things you can't [do]. When you not married, it's not good. So now we are small, so we have to wait for our time. And God is going to give us the good husband so that now you can get married, it is okay. But for now it is not good. (Mary, 18 years)

D: Oh yeah, me, when I talk with my aunt...we talked about HIV/AIDS and about sexual. And she told me that sexual is not bad, but when you are not married that is not good. (Esther, 19 years)

D: Yeah, because she usually tells us to abstain until marriage. Because you know, if you fornicate it will bring you many problems. For example you can attract that killer disease, AIDS. Or else you can get pregnant. That is not good at all. (Iris, 17 years)

Many mothers were also said to advise strategies to maintain abstinence, including avoiding boys and men and (to a lesser extent) pursuing education. For instance, Fathiya shared that her mother advised her to completely avoid relationships with boys and men to avoid HIV/AIDS. With regard pursuing education, both Jane and Mary shared that their mothers encouraged them to wait to have sex and focus on school instead.

D: Sometimes we met and talked with her about HIV/AIDS. And she told me: “Don’t get in any relationships with any boyfriends, or any man, because they get most of [HIV/AIDS].” (Fathiya, 18 years)

D: She normally advises me that I should not go engage myself with such kind of immoralities. That I should continue with education. Then once I have been employed, then by that time I can go looking for a well and responsible man. (Jane, 18 years)

D: I am in school. She tells me how to wait, to not to go and have sex outside. I have to wait. And if I wait for now, because I am in school, I can be ahead. (Mary, 18 years)

Ongoing communication: With regard to the sub-theme of ongoing communication, several daughters mentioned that their mothers advised them to continue to communicate about sexual health. Hannah mentioned that her mother encouraged her to turn to her anytime she was facing a problem and that this advice helped her feel supported. Jane shared that her mother encouraged her to turn to her parents if ever considering making decisions that put her at risk, such as engaging in prostitution.

D: Yes, she told me that not matter what happens, she’d still be my mother, and I should be talking to her about my problems because that’s why she is there. She is there for me to confide, for me to have any problem, no matter big I should tell her about it. And, it made me feel really good. And I felt really...not so alone. (Hannah, 19 years)

D: She was trying to tell me in these risk places, I should not try to follow those that are risky, and I should also not engage in prostitution...Instead, I guess, if I have a problem that requires an amount of money, I should not go to that kind of things. Instead, I should go to my parents and advise them. (Jane, 18 years)

HIV testing: With regard to the sub-theme related to HIV testing, it is important to note that this advice did not seem to be common. Only Alice mentioned that her mother advised her to abstain from sex and to go to a voluntary counseling and testing (VCT) center to get tested for HIV. Importantly, Alice’s mother recommended testing later in life, seemingly at marriage.

D: My mother told me don't cheat (have sex) with people. To wait, and when that man will come, to go to VCT. (Alice, 16 years)

End of the conversation.

When discussing how the conversations ended, main themes included that both mothers and daughters ended conversations, typically in different manners. In reflecting on the conversations, another theme emerged. Specifically, many daughters also noted that they valued these conversations with their mothers. Each of these themes will be expanded on within the following subsections.

Mother-ended conversations

Daughters were most likely to mention that their mothers ended the conversations. In nearly all cases, mother-ended conversations were said to end on a good note. Most were said to do so by espousing an encouraging sentiment, as Ada shared. This seemed common, even in conversations that began confrontationally. Patricia's conversation started after she was escorted home by her boyfriend and she shared that, although her conversation with the older sister (non-biological mother) was difficult, it ended on a good note.

D: My mom told me not to lose hope. (Ada, 19 years)

D: It ended at a very high note because we had to have some conversation about him. "You are coming with this to me, a menace. Why did he come here?" Then she cooled down and told me, "Don't sister have no bad attitude about your boyfriend." That's how it ended, on a very high note. (Patricia, 18 years)

Daughter-ended conversations

Among the few cases where daughters indicated they ended the conversations, most indicated that they tended to do so by disengaging in the conversation. Iris, whose conversations with her mother were minimal and tended to focus on the fact that

HIV/AIDS was a “killer disease,” shared that she often felt she was being reprimanded and tended to physically move away from her mother during conversations about sexual health.

D: You know it's not just like a talk, like the way we are sitting and talking. It is just like the way when someone has made a mistake. So she starts advising you...and you move away from her and she starts talking about it. (Iris, 17 years)

Value of conversation

As mentioned, another theme that emerged when discussing the conclusion of conversations was that many daughters strongly valued the conversations and intended to follow their mothers' advice. For instance, Hannah shared that her mom inspired and challenged her to make healthy decisions. Ada shared that her mother helped her to feel hopeful and secure after a man threatened to rape her. Moriah shared that she appreciated her mothers' advice because helped her understand the “rules” about sex.

D: My mom, she tells me that you are being wise. That once, you do everything you don't want to live in regret: “I wish I had done this, I wish I hadn't done this.” My mom is a source of inspiration and she is a critic. [laughter] So she tells me, you know: be me, be very responsible, go for my dreams. And, because I don't want to disappoint my mom, I want her to be very proud with me. So before I do anything...I go somewhere and in the back of my head I think, “Should I do it? Should I do it?” So my mom, she influences me. (Hannah, 19 years)

D: So I lose hope and I say there is no hope in this world...me, I can tell my mom, “Mom there is no hope in this world.” So mom tried to convince me that there is hope every where. She convinced me. She told me trust in God always and to try to say no to boys and also to say no to sex. (Ada, 19 years)

D: Yeah, it does help me. Because if I can talk to my mother, she tells me, “That is bad.” Then I can know, actually, what are the rules. (Moriah, 16 years)

Conversation facilitators.

Daughters were asked about what made it easier for them to talk with their mothers about sexual health. Most daughters spoke of a variety of facilitators. Main

themes included: a) their strong relationship with their mothers, b) their mothers' knowledge and insight, and c) the importance of the issue at hand.

Strong relationship with their mothers

Many daughters shared that it was the strength of their relationship with their mother that helped them to talk with her about sexual health. Hannah shared a story where she decided to tell the truth after lying to her mother about starting her monthly period. According to Hannah, it was this talk that helped her realize how much she valued her relationship with her mother. Shalisa shared that her relationship with her older sister (non-biological mother) was strengthened when they were coping with her mother's passing, making it easier to talk with her about sexual health.

D: And we went, we sat, we talked...it was hard. It was hard, but I think that's when I started to know she's not just my mom she is my friend. She didn't go, "Augh, you were lying!" She was very understanding. (Hannah, 19 years)

D: Because, okay, my sister, when I was growing, and my mother got sick, she kept me from being alone...and so by that our bond grew tight. So I didn't find it hard to talk to her. (Shalisa, 18 years)

Mothers' knowledge and insight

Some daughters shared that it was their mothers' knowledge and experiences that made it easier to talk with their mothers about sexual health. For instance, Ada shared that she felt her mother had already experienced the same things she had, making it easier to talk with her. Mary spoke of her mother's ability to help her distinguish between what was "good" and what was "bad" which informed her subsequent behaviors.

D: Yeah, about sexuality. I ask her some questions because you know she had all the difficulties that I've had...she was once there. So they are just like the same struggles, or the sense of difficulties that I do. So in every act about sexuality, I do talk with my mom. (Ada, 19 years)

D: Easy to talk? Maybe I have seen something for some girls and men, when they come to us I ask her, "If some one is doing like this, is it good or is it bad?" Then she tells me that this is good thing, or maybe it is good or it is bad. She usually tells me when I have seen something, and then I ask her, "The things that are outside, are they good or are they bad?" So that maybe I wanted to join them, she tells me, "It is good, you can join them." But if it is not good she tells me, "Don't join them, they are not good." (Mary, 18 years)

Importance of the issue at hand

Other daughters shared that the importance of the issue they discussed with their mother made it easier to have a conversation about sexual health. For instance, Fathiya shared a story of how her mother told her that HIV/AIDS was deadly and that she should avoid relationships with men. She felt the conversation was life saving. Tamara had shared a story about turning to her mother after a girl from their village was raped. In this instance, it was the gravity of the situation that helped her to turn to her mother.

F: Okay, why was it easy?

D: Because she knows how to save my life. (Fathiya, 18 years)

D: I have a problem, but the problem is not my own. And it is about my friend and how to take her as your daughter. Because you know normally here, you have to help her. Now, as you know, it was difficult in a part, but you have to help her. Because if you don't help the girl, she is going to be in trouble. (Tamara, 19 years)

Conversation barriers.

Daughters were also asked about what made it difficult to talk with their mothers about sexual health. With regard to main themes, some barriers seemed daughter-related, whereas others seemed mother-related. Both of these themes will be elaborated upon in this section.

Daughter-related barriers

Some barriers were related to the daughters' discomfort in talking with their mothers. For instance, Hannah indicated that she generally felt uncomfortable discussing

her feelings directly with others. She was also concerned that her questions might impact her mother's perception of her. Iris shared that she generally did not feel comfortable talking about sexual health with her mother.

D: Okay, well first thing, I'm not really good at telling people face to face what I feel. It is very hard for me to tell her how I feel. It was hard for her also because she is so, maybe, I'm not just a little girl she used to know. But it helped. It was kind of a stage where we came to trust each other a bit more. (Hannah, 19 years)

D: Yeah, sometimes it is difficult. But when you're talking to your friends, it is not so difficult. Like when you're talking to your mom, because you know you cannot just ask any questions to her. Yeah, but a friend you can ask anything to her. (Iris, 17 years)

Mother-related barriers

Other barriers were related to daughters' perceptions of their mothers. Daughters tended to be concerned that i) their mother would get upset and that ii) their mother was not knowledgeable enough about sexual health. Both of these sub-themes are explained in the following paragraphs.

As mentioned, some daughters were reluctant to talk with their mothers because of concern that their mother might get upset. For example, Shalisa had difficulties with her boyfriend and was afraid to turn to her mother. She was concerned that her mother might get displeased at her involvement with the young man.

D: At first it was difficult because I felt that I was not ready to go and ask her. But I just didn't know what to do and I didn't have any one person to go to. So I just found her and she didn't get upset even though it was the first time we talked about it. (Shalisa, 18 years)

In other cases, daughters were concerned that their mothers did not know enough about sexual health. Rachel shared about her frustration in not being able to talk with her mother about sexual health-related issues. She felt that, in general, mothers needed more

information about sexual health to be able to impart meaningful information to their daughters.

D: Maybe, I don't know how, but maybe some of our parents...I don't know whether they need to get educated or what. There are some issues that they just don't understand and that makes some of us find it hard to discuss some issues with our mothers especially. Because, like, we know that they would like to learn a lot. My aunt came to my mom and said that. And we ended up arguing with my mom about that. So there's no way I can sit comfortably and talk these issues with her. So I guess our mothers, they need to have some lessons so that they can be taught some of these things. (Rachel, 17 years)

Sexual Health Knowledge

All daughters were asked about what they knew about sexual health. Daughters spoke both about their knowledge related to a) HIV/AIDS and, to a lesser extent, b) other STIs. Each of these themes will be discussed at length throughout this section.

HIV/AIDS.

All daughters mentioned HIV or AIDS during their interviews. With regard knowledge about HIV/AIDS, sub-themes included information about i) HIV/AIDS awareness, iii) HIV transmission, iv) HIV risk reduction methods, v) HIV testing, vi) HIV treatment, and vii) HIV myths. Each of these sub-themes will be detailed in the following subsections.

HIV/AIDS awareness

When speaking of sexual health, all daughters imparted a basic awareness of HIV/AIDS. In many cases this was limited to knowledge that HIV was not curable or a “killer.” For example, Mary shared that by being “good” you could avoid HIV. Grace shared that she knew HIV had killed many people.

D: Sexual health? I know that if you can, be you try to keep yourself as good as you can. As good, so that you will not get HIV. (Mary, 18 years)

D: I know that it is a killer disease because it has killed many people. (Grace, 15 years)

Very few daughters shared in-depth knowledge of HIV/AIDS. To point, Anna was the only daughter that gave a concrete definition of HIV, mentioning that it was a virus that attacked white blood cells. Importantly, Anna's mother was HIV positive, which may have enhanced her understanding.

D: The virus (HIV) lives in the body. It fights the white blood cells and it kills the white blood, and [once] it's killed, the body starts, you start getting sick. (Anna, 15 years)

HIV transmission

Most daughters noted a form of HIV transmission. That said, nearly all daughters focused on transmission via sexual intercourse. In addition, several daughters seemed to imply that HIV could be transmitted by being sexually *active*, as Ester mentioned.

D: Yes, me I am coming here to seminar about HIV/AIDS because people have taught many of us about HIV and what people get that disease. Because us people, even boys or girls, one has to be sexed (sexually active)... I got scared about HIV and there are many. Now we are coming to be taught, to know about, to learn more about HIV. And what we can teach. (Ester, 19 years)

To a lesser extent, daughters spoke of transmission through sharing needles, cuts from sharp objects, from mother-to-child, and through blood transfusions. Both Hannah and Shalisa noted multiple forms of HIV transmission.

D: There is a lot. There is through maybe sharing needles or things that are sharp that gets into your bloodstream, having sex with an infected person, from an infected mother to her unborn baby, [and] blood transfusion with infected blood. Those are the ways. (Hannah, 19 years)

D: Yeah, and I know that for one to get there are several ways to get HIV... Maybe sexual intercourse, or maybe from mother-to-child, or sharing sharp objects. (Shalisa, 18 years)

HIV risk reduction methods

Most daughters discussed a method of reducing the risk of HIV/AIDS. However, the majority of risk reduction practices were centered on abstinence, as indicated by Jane. Relatedly, Hannah noted that abstinence was frequently encouraged, but difficult to maintain.

D: ... the way of preventing from such kind of disease is a way of abstaining from sex, and maybe is keeping from a prostitute... (Jane, 18 years)

D: You are told, "Abstain, abstain, abstain!" but it is not that easy. (Hannah, 19 years)

Many daughters also mentioned "protected sex," or condoms. In most cases they implied that this was not an effective method, as Hannah noted. In fact, several espoused a mantra that condoms are not 100% effective, as evidenced by Moriah.

D: But if you are going to have sex, you should use protection. But again, protection does not guarantee complete protection. So I think that the best thing is abstinence. (Hannah, 19 years)

D: Sometimes we can protect that (sexual health), but I learned that condoms are not one hundred percent [effective]. (Moriah, 16 years)

HIV testing

Many daughters mentioned HIV testing. In most cases they reported that they had been advised to get tested if sexually active through educational seminars or at school. Jane mentioned that her school principal had encouraged all students to get tested for HIV.

D: Yes. There was a time when I go for [a HIV test]... I knew I was safe, but I just wanted for a medical [test]... We are being taught by our school that everyone must go for a VCT, and we went all of us because our principal wanted to know the status of each one of us. (Jane, 19 years)

HIV treatment

A few daughters expressed an awareness of HIV treatment during the interviews. In most cases, they referred to “medicines” that people living with HIV could take, as exemplified by Alice. Ada shared that anti-retroviral treatments were not always available to help people live longer.

D: They say you can go to the hospital, and get medicine for helping you. (Alice, 16 years)

D: About AIDS. They do say that it's here, it's a killer disease. They don't know whether there are ARTs—retrovirals—for keeping ones health for longer. So the thing they say is that after one gets attacked, or gets affected with HIV and AIDS, in the community that person has to pass away. (Ada, 19 years)

HIV myths

Many daughters expressed HIV myths, among them that religious beliefs and practices could prevent HIV, that condoms are dangerous, that sexual activity can cause HIV, and that HIV could be transmitted by sharing toiletries. Each myth is described in the proceeding paragraphs.

Some daughters mentioned that by being faithful or going to church one could avoid contracting HIV. For example, Ester shared that she felt that by being “holy” she could avoid HIV/AIDS. She also seemed to insinuate that girls were more likely to pray and therefore less likely to contract HIV.

D: You go, you look, you look [at] boys, you look [at] girls. When you look boys, boy is sick with HIV. And girls, you see talk about prayers...And for me myself, when I am out I [try] to be holy...Look because when you be holy, bad things cannot touch you. And when you not be holy, all things, even HIV comes. Evil will be there. And I pray god because me I am saved. (Ester, 19 years)

Some daughters also indicated that they believed the myth that condoms were dangerous. As previously mentioned, many daughters were very explicit in denouncing

condoms. Some seemed to believe that using condoms could increase your chances of contracting HIV, as evidenced by Mercy.

D: You know these days, some people they say that the things that they are using, like condoms and other things... They say that those things are protecting us, but for these days, nothing like that, because if that thing bursts, it bursts in your body. So if that person has AIDS, you can get it. So, you try to protect yourself so that you can achieve your goals and go on with your life. (Mercy, 18 years)

Another HIV-related myth, touched upon earlier in this section, was notion that HIV could be contracted via sexual activity. For instance, Moriah mentioned that sex causes diseases. It is important to note that, while HIV is often transmitted via sexual intercourse, the act of engaging in sex itself does not “cause” HIV.

So I cannot engage in that (sex) because I know that actually it can cause diseases. (Moriah, 16 years)

Lastly, several daughters mentioned that they believed they could avoid HIV/AIDS by not sharing toiletries. Jane expressed that she avoided sharing toiletries with others so that she would not contract HIV. Iris shared that she avoided sharing hair brushes because of her fear of contracting HIV.

D: I normally use my [toiletries]. Don't want to borrow from other friends, because maybe that person might be having a disease. She might have cut herself. I normally have my personal items. (Jane, 18 years)

D: You've got to use your own brush, even at home. Because, actually, we don't know those who are infected. (Iris, 17 years)

Other sexually transmitted infections.

Nearly all daughters spoke of STIs other than HIV. For sake of simplicity, STIs other than HIV will be referred to solely as STIs within this section. Sub-themes related to STIs included i) STI awareness, ii) STI symptoms, iii) STI testing, iv) STI treatment. Each of these sub-themes will be expanded upon in the following subsections.

STI awareness

Several daughters were able to name specific STI's, typically syphilis or gonorrhea. Unfortunately, few seemed to know much about STIs beyond that. For example both Theresa and Shalisa shared that they knew of syphilis and gonorrhea by name only. Iris only mentioned that they were very common.

F: What do you know about sexual health?

D: Um...examples are HIV and AIDS and gonorrhea, syphilis, and [other infections]. I don't know anything else. (Theresa, 15 years)

D: Yeah, I know about a disease called syphilis, gonorrhea. That's it. (Shalisa, 18 years)

D: Yes and like STDs, like gonorrhea and syphilis, be careful with them. I look up and there are so many girls who used with them and some of them get [infections], and some of them they die. (Iris, 17 years)

STI Symptoms

Only one daughter mentioned STI symptoms. Jane did not mention any specific symptoms. Instead she noted that many STIs may not have any symptoms, thus it might be difficult to know if a partner was infected with a STI.

D: Because I may not know whether or not he is not suffering from HIV [or] suffering from syphilis. And, you know, maybe symptoms I may not be able to identify...the chance is not good. I may not be able to infer whether this person is suffering from gonorrhea, syphilis. (Jane, 18 years)

STI Testing

Few daughters mentioned getting tested for STIs other than HIV. Patricia mentioned that if one contracts a STI, they can get tested at a Voluntary Counseling and Testing (VCT) center.

D: School, they told us that one gets these [bad] health which is by sexually transmitted diseases. If it was unprotected sex you can go to the VCT. (Patricia, 18 years)

STI Treatment

Even fewer daughters mentioned treatment for STIs. No daughters talked in-depth about STI treatment. Hannah mentioned taking medicine to treat STIs.

D: I know that most of them (STIs) are treated with special [medicine]. (Hannah, 19 years)

Daughters' Sexual Risk Reduction Methods

Daughters were also asked to share a story about a time they did something to protect their sexual health. Daughters cited five prevention strategies that included: a) abstinence, b) education, c) HIV and other STI testing, d) avoiding risky situations, and e) avoiding drugs. Each of these themes, and related sub-themes, will be addressed in this section.

Abstinence.

Nearly all daughters cited abstinence as their main risk reduction behavior. For instance, Ada referenced a popular Kenyan abstinence slogan “Neme Chill” in sharing about her choice to abstain. Most daughters referenced how God or their religion helped reinforce this decision to abstain. Mercy shared her story of choosing to abstain amidst the pressures to have sex and fears of HIV/AIDS, and how she turned to God for guidance. Ester also shared that she turned to God to help her wait to have sex, despite her desires.

F: Good, very good, and what do you do for yourself to prevent HIV and AIDS and other things?

D: “Chill.” To abstain.

F: You abstain? “Chill?”

D: Yeah “Neme Chill.”

F: Can you translate “Neme Chill.” What is that in English?

D: In English, “To abstain.” (Ada, 19 years)

D: I want to abstain because I see how our people are getting AIDS. And how people are getting, are suffering, and I don't have my mother and father. So I have, I stay with my cousins.

(Later in interview)

D: Because I see many things are happening in this world. You can see Standard Four girls is getting a challenge. Or Standard Four girls is getting AIDS. So I choose to abstain, I took an oath. And sometimes I feel the pressure, but I go and kneel and I pray God to help me to be that, to get out of that situation. (Mercy, 18 years)

D: But I pray God that when he want to give me a husband, or to give me a home. I'll be that time, that time...I will be doing that. But now, because I am young, I will think of that opportunity. I have to wait...Sex is like a blessed sweet. When you abstain, even at this time, you are seeing that you have that taste. That even those who want, those who like that, they are like sweet. When you are seeing that taste, you are here doing bad things. (Ester, 19 years)

Education.

Several daughters spoke of education as a mechanism of protecting their sexual health. Sub-themes were divided among i) self-education and ii) peer education. With regard to self-education, daughters spoke of attending seminars to improve their sexual health knowledge, as evidenced by Moriah.

F: The next thing I would like you to do is tell me a story about a time you did something to prevent HIV/AIDS or other sexually transmitted infections.

D: Things that talk about sex, like how to protect. Yeah like that. I actually go for seminars. For counseling, so I can learn more about that. (Moriah, 16 years)

With regard to peer education, daughters seemed to indicate that educating others helped all youth, including themselves. For instance, Ada spoke of her role as a Peer Educator, and how educating others had the potential to impact many women in her age group. Daughters also seemed to indicate that advising other young people helped reinforce their own decisions. For instance, Mercy spoke of how advising others to remain abstinent helped her to make healthy decisions.

D: Because I know that through my mom's advice, I will be able to go into different locations or different places to urge young people to try to abstain—to

say no to sex. And also to say no to sexually transmitted diseases. Know that we can be able to control HIV from age of 15 to age of 19, because many young girls are dying just because of it, when they are very young. (Ada, 19 years)

D: Okay, I tell you about how I protect myself. Okay, like to have sex, like to tell those people to stop the sexual relationship. Like to tell the others that they are supposed to be very careful with their ways...And like that, so I say I protect my life and [it is] my goal [to be] healthy, so that I do so and help those people who are in darkness. They can not get out of that thing. Yes. (Mercy, 18 years)

HIV and other STI testing.

A few daughters mentioned seeking testing in the future to reduce their sexual risk. Jane shared that she is currently abstaining from sex, but that when she finds a partner she plans to get tested with him for HIV and other STIs. Ester explained that she plans to go to the hospital and get tested for HIV and other STIs.

D: You know, I myself, I normally abstain from sexual, because I normally think having sex with another partner and maybe not knowing his status. That is why I normally fail to engage in sex. And if I get a, once I get a companion, I will insist him that we will go for a test. Because I may not know whether or not he is not suffering from HIV, but suffering from syphilis. (Jane, 18 years)

D: When we are talking about HIV/AIDS, even if you are going to hospitals, even doctors will tell you about HIV/AIDS. They will tell your test results and [you will] know yourself. Because there are many diseases, not only HIV/AIDS. There is many disease and you are seeing people are dead because of HIV/AIDS. (Ester, 19 years)

Avoiding risky situations.

Some daughters spoke of avoiding risky or dangerous situations as a method of sexual risk reduction. Specifically, they tended to speak of avoiding certain i) peers and ii) social settings. Rachel spoke of staying away from certain places and peers, to avoid peer pressure to engage in sexual activity. Mary spoke of spending time with her mother rather than going out with peers and ending up in unsafe settings.

D: Okay, the main thing is just knowing myself that I am living myself. Minding the places where I go. Minding the people I socialize with. Yeah.

(Later in interview)

D: Because I think I need to, you know, I need to feel secure [with] who I am. So, definitely, I have to mind where I go, who I talk with, because anything can happen. Like maybe I'm out, maybe for a party, maybe I tell my mom I'm somewhere else. No one is there and anything can happen. If anyone's to blame it's myself. So I have to mind where I am. I have to mind my friends because of peer pressure. Yeah. (Rachel, 17 years)

D: I protect myself by avoiding bad company. I feel that I not going to join them because maybe I don't know what will come out of the end. They know that, bad company. So I usually talked to them, then they may say it is better. I think in our home maybe I do something, I help my mother. But [I do] not to join the bad company, because when I'm with them they don't know what come the end. Maybe my friends will tell me to go somewhere else. Then when we went maybe we get bigger things, someone could be raped. Those things are not good, so I usually try to avoid them. (Mary, 18 years)

Avoiding drugs.

One daughter spoke of drugs during the interviews. Bethany shared that she avoided drugs because of the tendency of drugs to cause people to lose control and adopt dangerous behaviors that put them at risk for HIV/AIDS.

D: When you take/abuse [drugs], you will become madmen or mad because you will go around beating peoples.

(Later in interview)

D:[long pause] To be not using bad drugs. But when you are home, do not, when you see the sunlight go down and you start drinking, it is real bad. Or starting when you go out, take peoples, and start AIDS with your body. (Bethany, 15 years)

Cultural and Religious Influences on Communication, Knowledge, and Risk Reduction

Throughout the course of the interviews, daughters referred to both a) cultural and b) religious influences on sexuality. Specifically, daughters extensively discussed both types of influence on sexuality-related communication, knowledge, and risk reduction behaviors. Both themes are discussed in the following sections.

Cultural influences.

Most daughters spoke of the influence of their culture on their conversations with their mothers, their sexuality-related knowledge, and their risk reduction behaviors. In most cases, daughters spoke of culture in a general sense, though occasionally, they mentioned Kenyan or Kikuyu culture. Main sub-themes included that culture encouraged i) abstinence, ii) communication with mothers, and iii) a silence around sexuality.

Several daughters also spoke of specific cultural practices that had an influence on HIV prevention in general. Each sub-theme will be discussed in the following subsections.

Abstinence

Many daughters noted that their culture emphasized abstinence and, therefore, impacted their decisions to abstain as a preventive method. For example Patricia mentioned that she abstained because it is what her culture encouraged. Interestingly, in mentioning how culture influences their decision to abstain, many daughters spoke of cultural and religious values simultaneously. Hannah mentioned the way in which culture and religion were intertwined and promoted abstinence.

D: My culture, what it does it's very positive on us because it's what tells us is about marriage. It is good because my culture says sex before marriage is bad. So what I chose is exactly what my culture says. (Patricia, 18 years)

D: I think the fact that, our culture is religious... You choose to abstain because [if] you get a certain disease, you might use protection to reduce the risk of disease. But I think that when you know that according to your faith that it's wrong to have sex before marriage. It doesn't say, "You can sex with a condom. It's all right, its okay." It says no sex at all before marriage. I think that has helped a lot to keep me in check. Because, I'm Christian. I try to do what's right. I know that has really helped me remain abstinent. (Hannah, 19 years)

Communication with mothers

Some daughters mentioned that culture promotes communication with older individuals. Daughters also tended to share that encouraging communication with older people helped to facilitate mother and daughter communication about sexuality. Both Patricia and Mary spoke of culture and how it ultimately encouraged them to communicate with their mothers.

D: Yeah I think it was a challenge because if you don't talk to her (mother)...the culture tells us to get advice from who's older than you to get advice on the future and to cope with life. (Patricia, 18 years)

D: They say it is good to talk to your mother when she is telling you the right ...because if you are not talking with your mother maybe you can get in some dangerous things. In life you have to talk to your mother, because she is the one who has already seen for many years than you. So you have to listen what she's telling you so that you can be able to live in life. (Mary, 18 years)

Silence around sexuality

Culture was also said to discourage communication about sexuality. Several daughters mentioned that they felt that the culture reinforced a silence that made it difficult to discuss sexuality and ultimately impacted their sexuality-related knowledge. Shalisa discussed how discussing sexual health with youth is taboo in her culture. Hannah mentioned that she felt the cultural silence limited her sexuality-related knowledge.

D: Well, in our tribe talking about sexual health is hard. For example my mother could be different and perhaps infect the group, because they think that it's not good. They think that it's an embarrassing thing to talk with the children about. So it's very hard to talk among them, to talk to them. They think that we are too young to know things. (Shalisa, 18 years)

D: [Culture] restricts me a lot so that I wouldn't be exposed to [information about] anything that would give me a disease ... because in our culture, you don't talk sex. Sex is very private. You don't even talk about it with friends behind closed doors. [laughter] It's not talked about. (Hannah, 19 years)

Cultural practices

Some daughters also mentioned specific cultural practices that influenced HIV prevention in general. Mercy mentioned that her tribe was moving away from the practice of female circumcision, and that she was aware that unsanitary tools used during female circumcisions were contributing to the spread of HIV. Ada mentioned that many in her tribe were polygamous and that they did not tend to be aware of STIs other than HIV. Though no daughters spoke of either of these practices directly impacting them, daughters seemed to feel that these practices put many people at risk for sexual health problems.

D: Ok... my tradition is a Kikuyu, so in that time people are going to be circumcised. So from there we stop it. We stop it because we see people are getting AIDS. Because those people they are not protecting those things after using them. So, from there, in my family, in my tribe, we stop it... But on the other time, they are with it. But they show that people are getting AIDS because of that, those tools. They are not protecting them, so we stopped it. (Mercy, 18 years)

D: About our tribe is that many in our tribe they are polygamous.

F: They're polygamous?

D: Yeah, polygamous. Now what they say is that—yes there are other sexual diseases—but what they do is, they just escape each others. They don't know whether there are others (other diseases). (Ada, 19 years)

Religious influences.

Nearly all daughters spoke of the influence of their religion. As with culture, religion was said to have an influence on their conversations with their mothers, their sexuality-related knowledge, and their sexual risk reduction behaviors. Religion was said to encourage a) abstinence and b) communication with mothers. Each of these themes will be discussed in the following sections.

Abstinence

A majority of daughters mentioned that their religion promoted abstinence. Because of this, many daughters noted that religion reinforced their choice to abstain from sex as a preventive method, as Hannah mentioned. Religion was also said to encourage young women to avoid men as a strategy to maintain abstinence, as Bethany shared.

D: It (religion) says no sex at all before marriage. I think that has helped a lot to keep me in check. Because, I'm Christian. I try to do what's right. I know that has really helped me remain abstinent. (Hannah, 19 years)

D: They told us that we just that we be careful of our bodies when we go out there. Don't speak with men that are looking and are telling you to go out there to buy you something, do not go. (Bethany, 15 years)

Communication with mothers

Many daughters felt their religion had an influence on their conversations about sexuality with their mothers. Several daughters noted that messages in church and home tended to reinforce one another. Thus, religion was said to influence both communication and knowledge, as Iris mentioned. Hannah shared how her mother's belief in Christianity encouraged her to communicate, despite her low levels of sexual health knowledge.

D: Yeah, because we are being told in church...it is the same thing that is being brought back home by our parents. So you get to understand what is being taught at church and what our parents are telling us. Because about HIV, the same thing is being taught, it is now in our country, our churches, and back at home. (Iris, 17 years)

D: Yes, my mom is a really strong Christian and she always believed that she got really lucky to be a mother. She tries to be a mother the best way that she can. I think she always tells us that being a mother, you don't have any skills, not really. But, she tries to do her best and hopes that it's all going to work out. So sometimes she doesn't tell us about things—she doesn't know what to do, she

doesn't know what steps to take. So she prays about it. And she has given that us. So I think religion had a lot to do. (Hannah, 19 years)

Mother Cross-Case Analysis Results

The mother cross-case analysis results are organized into the following sections: 1) mother-daughter communication about sexuality, 2) sexual health knowledge, and 3) influences on sexual health communication, knowledge, and sexual risk reduction behaviors. For the most part, categories are associated with themes and patterns that emerged in relation to specific interview questions that were asked in reference to each of the research questions of the present study. Other categories emerged during the analysis procedures. Each of these sections, along with related themes and sub-themes, will be discussed in detail.

Mother-Daughter Communication about Sexuality

Mothers were asked to tell a story both about a time they talked to their daughter about sexuality and a time they talked with their daughter about sexual health. In responding, mothers did not clearly differentiate communication about sexuality and communication about sexual health. For instance, mothers were likely to discuss topics (e.g., pregnancy) both when sharing stories about talking with their daughters about sexuality and about sexual health. Because of this, themes from both conversations were collapsed and organized under the broader theme of mother-daughter conversations about sexuality.

All mothers spoke of talking to their daughter about sexuality and sexual health. Their stories included rich narratives that were organized into the following narrative components: a) start of the conversation, b) content of the conversation, c) end of the

conversation, d) conversation facilitators, and e) conversation barriers. Each of these components is discussed at length in the following subsections.

Start of conversation.

Mothers shared stories that involved both mothers and daughters starting the conversations, though mothers were more likely to share stories about starting the talk with their daughters. In most cases, conversations were said to start because of a) a strong catalyst, b) exposure to new knowledge about sexual health, c) knowledge seeking, and d) daughters' developmental phase. Each of these themes discussed at length in the following sections.

Strong catalyst

Regarding conversations that began because of a strong catalyst, four sub-themes emerged. Sub-themes included i) rape-related incidents, ii) concerns with romantic partners, iii) sexual risk-taking behaviors, and iv) exposure to someone living with HIV/AIDS. Each of these sub-themes is detailed in the following paragraphs.

Rape-related incidents: Some mothers started conversations with their daughters because of incidents related to rape. Bernice spoke with her daughter Grace after another girl was raped. Elizabeth (non-biological mother) spoke in general of warning her younger sister Jane about the risk of being raped. In both cases, the mothers discussed strategies to avoid rape. Ruth shared a story about a time her daughter Hannah shared that she had been molested as a child after learning about sexual health in school. In Ruth's case, she told Hannah that one perpetrator had been "dealt with," though it is not clear in what manner.

M: There was a time I talked to her because myself I am the parent. You see when the daughter is out... You heard that [another girl] was raped by somebody.

You are together with somebody, so I tried to talk to her and convince her to be careful. (Bernice, mother of Grace, age 15 years)

M: And now after that, because you don't want to annoy her, I have to tell her that she has to be aware of those boys and also being raped. Because of their way of dressing, some wear transparent clothes. So I was telling her to make sure you are not alone. You have clothes that are not transparent. You don't have to look at men and they think that all—that men, they can help you so much. Even if you need help, and be able to get money from yourself. You can help yourself, even without the help of a man. (Elizabeth, older sister of Jane, age 18 years)

M.: (long silence) You know with the kind of relationship that I have with her, it's almost impossible to pinpoint what, at a point, because this has been an on going process. But I remember incidents of when she goes to school and they are taught about sexuality and sex. And then she would have memories and issues that she would want to clear with me.

And she comes and tells me...and you know there was this one time she told me stories about what was happening to her when she was little, when she was very young. I had a neighbor, who was my friend, who was a doctor. And my girls are very friendly with him. Little did I know that when he came to visit, he would touch them. You know, in a molesting kind of way. And I didn't realize. And I think that they learned something about it in school, in secondary school. She comes and tells me about the whole story. She tells me that "I never told you about it." And some other incident when she was very young. She told me there was this boy who used touch. And I told her, "This one we dealt with, we did." And what made me so sad was that then, when it was happening, she was not able to tell me. (Ruth, mother of Hannah, age 19 years)

Concerns with romantic partners: Many mothers reported that conversations began because of issues related to daughters' relationships with their boyfriends. Several mothers were concerned about the relationships and the increased potential that the daughter would engage in premarital sex. Elinah (non-biological mother) shared about a time she talked with her younger sister Patricia after catching her with a man who used 'bang' (slang for marijuana).

*M: There was one day I caught her with a guy. [laughter] That guy was...he didn't have good behaviors. Now that time I got serious. I told her, "That guy, such people, are not good. He takes bang."
(Later in interview)*

M: You see what I said to her, with that man, I told her not to be [interacting] with such man. Because he wastes her time and her school and she maybe get pregnant. I told her there is this HIV/AIDS. I told her so many things about AIDS. (Elinah, older sister of Patricia, age 18 years)

Mothers also spoke of their daughters turning to them because of concerns related to their boyfriends' behaviors. Martha (non-biological mother) shared about a time her younger sister Shalisa came to her because she was having a problem with her boyfriend.

M: Ok, she had a problem with him because this boyfriend was having another girlfriend. So she came and told me. She was so disappointed. Then she was crying. And it just wasn't fair, you know? That is why encouraged her and tell her she should quit the relationship. (Martha, older sister of Shalisa, age 18 years)

Sexual risk-taking behaviors: Some mothers talked to their daughters to express concerns about their daughter's sexual risk-taking behaviors. Sharon talked of how she confronted her daughter, Fathiya, who was running away from home. Sharon warned Fathiya of the dangers of her behavior, including the risks of HIV, and supported her in pursuing Christianity.

M: My daughter? When she was about 14 years it was that time she was not a Christian. She was running away from home and I told her it was a dangerous thing. So I took a bad thing from her so she would stop running away from home. Because if she keeps running away from home, one day she would be in danger. So I tried to take from her. When the time came she accepted Christ as her Savior. So from then I started talking with her...I tell her there is these diseases—AIDS. She can just go and have child. There are so many diseases that can affect her. (Sharon, mother of Fathiya, age 18 years)

Exposure to someone living with HIV/AIDS: Some mothers reported starting conversations with their daughters because they knew someone else infected with HIV. Elizabeth (non-biological mother) started a conversation with her younger sister Jane because her neighbors were very sick and used their example as a warning. Jedida (non-biological mother) talked with her younger cousin Mercy because a close friend of Mercy's was thought to have contracted HIV.

M: The time we were talking, we were still looking at our neighbors who were...we could see their problems. They were having [HIV] and even their children, they were suffering. So I was just giving her the story and showing her the problem, which is on that family. They don't have money, they are sick, they are not able to get rent, so even they much as they need it to eat, they cannot be able to feed themselves so that they can be healthy. Because they are weak, they are not able to work. The children are still weak and they rely on friends who will not come always. So when they are forgotten, they have to sleep without food. So I was just telling her to look and see. It is not a good thing, that you are there and you are waiting to hear from someone else. And you could be working for yourself and earning for yourself, something which would help you for your future. (Elizabeth, older sister of Jane, age 18 years)

M: There was a friend of hers, a very close friend. That she left to go to town to go to work, that by the time she was coming back she was very ill. Now there was a lot of rumors that she is HIV positive. Now I tell her, "Do you know about the HIV and AIDS?" Now she was very adamant, because she was an orphan, she can see that, because nowadays you can get it from very little minor inch. (Jedida, older cousin of Mercy, age 18 years)

Exposure to new knowledge

Another main theme regarding the start of conversations was related to new knowledge about HIV prevention. Some mothers started conversations with their daughters after attending community-based seminars, and tended to share information they received. For instance, Persis shared information about HIV/AIDS with her daughter Tamara because she was advised to talk with others during a seminar.

M: Oh, yes I did [talk to my children] about HIV. For example, when I had attended this seminar for HIV and AIDS, I had to talk to them. Because you are told: "When you go home talk to five people." (Persis, mother of Tamara, age 19 years)

Knowledge Seeking

In other cases, conversations began because daughters had questions about sexuality, often based on what they had learned in school. For example, Ketura spoke of her daughter Anna asking her questions related to information she had learned in school.

In this case, Ketura shared information with her daughter about mother-to-child transmission of HIV and abstinence.

M: They learn from school. They have the class lessons about AIDS. They are being educated about AIDS, according to our talk about AIDS. And so they are taught not to be sexual before they get married because of the HIV. So she asks me, "Mom, is it true someone can get HIV sexually?" I told her, "Yeah." She expects me to know about it: "You know there are children that are born with AIDS because their parents had AIDS? There are youth, and some of them are grown up. So if you have sex with them, you will get the HIV." So I used to tell her not to do it...So you have to talk them, you have to. (Keturah, mother of Anna, age 15 years)

Daughters' developmental phase

Some mothers reported starting conversations in relation to a daughter's developmental phase. In all cases, they felt their daughter had reached a development period where it was important to educate her about sexuality. For instance, Karen shared that she started talking to her daughter Clare about the risks of sex when she began menstruating.

M: The time when I have talked with her is when she was in Standard Six, when she was growing up. I talked [about] that issue, how to defend herself, when she got menstruation period. (Karen, mother of Clare, age 15 years)

Content of conversation.

With regard to the content of conversations, main themes indicated that conversations included a) messages and b) advice. Messages included main points related to sexuality. Advice was specific recommendations that correlated with mothers' main messages. Both of these themes are detailed in the following subsections.

Messages

As mentioned, mothers tended to convey information about sexual health to their daughters during conversations about sexuality. Several sub-themes emerged related to

the focus of the messages including: i) the risks of HIV/AIDS, ii) pregnancies, and iii) hygiene. In most cases, messages seemed to be mentioned to dissuade their daughters from engaging in pre-marital sex.

Risks of HIV/AIDS: A majority of mothers discussed sharing messages about HIV/AIDS with their daughters. Bernice emphasized that HIV/AIDS was incurable. Keren mentioned to her daughter Clare that contracting HIV would bring a hardship on their family. Zorah, who is HIV positive, mentioned that by engaging in sex her daughter Ada could contract HIV.

M: Here when there is a lot of AIDS going on. So we try to tell her that it's not fair to do it, just to wait. You know even they have seen people dying...So I just try to tell [her] to be careful because this is a disease that has no cure. (Bernice, mother of Grace, age 15 years)

M: When I talk with her, I tell to make her know that being HIV [positive], that would be a difficult thing for ourselves. Even myself I know that bad. And that one, it would be good for her, because if she hears that the bad would not only be for her, it would affect me, she tries to see it would not be very good. (Keren, mother of Clare, age 15 years)

M: I talked to her many times of sex. You can get the HIV virus, or you can [be] safe. (Zorah, mother of Ada, age 19 years)

Pregnancy: Many mothers also shared messages about unintended pregnancies and the risks of mother-to-child HIV transmission. Karen spoke of warning her daughter Clare of spending time with young men, because of the risks of pregnancy and STIs. Cheryth shared that she warned her daughter Mary of mother-to-child transmission of HIV.

M: I tried to teach her how risky it will be if she goes with the boys they run with. Maybe she will get pregnant or have those diseases. (Keren, mother of Clare, age 15 years)

M: Sometimes somebody gives you HIV and it is bad. Someone give you a baby, that baby cannot have a mother, so it is so bad. (Cheryth, mother of Mary, age 18 years)

Hygiene: To a lesser extent, mothers' messages focused on hygiene, often in regard to a monthly period. Candice shared that she told her daughter Moriah about her monthly period at age ten and provided information on hygiene. Persis shared that she taught her daughter Tamara how to be sanitary during her monthly period.

M: I tell her when she was about 10 years, I tell her, when the monthly period comes, I tell her every month you will see that monthly period. I tell her to stay when she is body in that period, she comes very fresh, washing every time. She not be trying to bring the young boys or men. (Candice, mother of Moriah, age 16 years)

M: It was when I was teaching her how to wipe herself when she goes to the toilet. Yeah, and when she has menstrals, to be clean. (Persis, mother of Tamara, age 19 years)

Advice

Advice was specific recommendations related to the discussion. With regard to types of advice three sub-themes emerged. Specifically, sub-themes included: i) abstinence, ii) visually screening partners, and iii) HIV testing. Each of these sub-themes will be detailed in the following paragraphs.

Abstinence: Nearly all mothers spoke of advising their daughters to remain abstinent from sexual activity until marriage. Furthermore, many mothers insinuated that sex was bad or dangerous, as exemplified by Saba and Sharon. As with other mothers, Judith seemed to insinuate that sexual activity causes disease.

M: I just went on discussing with her how dangerous [sex] is and how to keep away from it, because it is not time for her to go into it [sexual activity]. (Saba, mother of Theresa, age 15 years)

M: It's not good because you see those other girls, you see diseases around us. I tell her about AIDS. She can see things good, but maybe she goes and meets

somebody that is having AIDS and is lost for her life. So I try and tell her it is not good. (Sharon, mother of Fathiya, age 18 years)

M: I am telling her, this is not good for her age. Because there is in many diseases which are caused by being sexual. (Judith, aunt of Bethany, age 15 years)

M: I just tell her AIDS is still around and if you start playing around with the boys, these things you will not avoid. (Talitha, mother of Rachel, age 17 years)

Mothers also tended to advocate avoiding men and boys and pursuing education to reinforce abstinence. Many mothers discussed how dangerous men were. For instance, Cheryth warned her daughter Mary that she could contract HIV by spending time around men. Several mothers also emphasized education. For example, Keturah shared that she had made an agreement with her daughter Anna, stipulating that she could choose to have sex after completing her secondary schooling.

M: They say you cannot go somewhere for men, you can get HIV and when you have get the HIV you have AIDS, so you cannot go there for me. And it is so bad. (Cheryth, mother of Mary, age 18 years)

M: Maybe by the age of 19 to 20 years she will complete Form 4. So we agreed to do better. She will complete her courses. She has the right to choose whether to have sex or not by the age of that. (Keturah, mother of Anna, age 15 years)

Visually screening partners: With regard to the sub-theme on visually screening partners, one mother mentioned advising her daughter to visually check sexual partners for STIs. Ruth recommended that her daughter, Hannah, avoid having sex in the dark. She recommended this because she had learned in a video that one should visually check partners for symptoms of STIs.

M: I told her about a movie that we saw about sexually transmitted diseases....And there was like a joke that they kept on telling everyone. That an African man will want to have sex, what you do is that you get into the house, and you close the door. You switch off the lights, you get into the blankets, you close your eyes, and then you have sex. You know that was an excellent way of saying

that you don't see what you are dealing with. (Ruth, mother of Hannah, age 19 years)

HIV testing: Several mothers advised their daughters to get tested for HIV. Some mothers mentioned getting tested in a general sense, as Persis shared. Others advocated for HIV tests when getting married, as exemplified by Cheryth.

M: I even tried to tell them to get tested. (Persis, mother of Tamara, age 19 years)

M: If you want the husband, you can go doctor to know HIV (status). (Cheryth, mother of Mary, age 18 years)

End of the conversation.

When discussing the conclusion of conversations, mothers mentioned that conversations were ended by both mothers and daughters. In addition, when discussing their perceptions of the conversations, many mothers also indicated that they felt their daughters valued the conversations and would follow their advice. Each of these themes will be expanded upon in the following subsections.

Mother-ended conversations

Mothers were most likely to indicate that they ended the conversation with their daughters. Some mentioned that they ended the conversation with a positive sentiment, typically encouraging self-value, as Saba shared. Others mentioned that they reiterated advice that encouraged abstinence until marriage. For instance, Elizabeth (non-biological mother) noted that she ended her conversation with her younger sister Jane, by repeating her advice to wait to engage in sex until after she completed school and could get married.

M: The talk ended by just telling her be careful, protect yourself, and be a good girl. (Saba, mother of Theresa, age 15 years)

M: It ended when...I was not [trying] to harass her, but to tell her that you can just wait until you are able to do for yourself things, things that will make your possibilities good. For now it (sex) is [not] a good thing for you. Get married after Form 4 and college. (Elizabeth, older sister of Jane, age 18 years)

Daughter-ended conversations

To a lesser extent, mothers indicated that their daughters ended the conversations on sexuality. In most cases, mothers indicated that their daughters shared that they would follow their advice. For example, Keren mentioned that her daughter Clare intended to follow her advice on avoiding HIV, because she did not want to be a “burden” on the family.

M: She concluded that she would never like to have that, to be in a [HIV] positive way...she talked about how, you know, if this disease comes to the end, the final stage, you are not going to be able to do anything. You need someone to take you out, to take you in. It seems like such a burden to the family. So she said she'd never like to have it. (Keren, mother of Clare, age 15 years)

Value of conversations

When reflecting on the conversation conclusion, many mothers indicated that they felt their daughters valued the conversations. Elizabeth (non-biological mother) shared that her younger sister Jane claimed to accept whatever she says. Alouch, (non-biological mother) spoke of her niece Ester sharing information with her peers after talking with her.

M: I think that because she accepts whatever I say, and even after something, she comes and tells me, “Yes whatever you told me is right.” (Elizabeth, older sister of Jane, age 18 years)

M: I noticed she understood that language, of not having sexual. Because even the other friend of her, if they come visit and I am not present, when I am coming, I can hear her telling them, “Let me tell you...” She talks like me. She talks like me, telling them. (Alouch, aunt of Esther, age 19 years)

Conversation facilitators.

Mothers were asked about what made it easier for them to talk with their daughters. Mothers mentioned a variety of facilitators. Themes included: a) their strong relationship with their daughters, b) their daughters' need for advice, c) the importance of the issue at hand, and d) the abundance of HIV information outside the home.

Strong relationship with daughter

Several mothers felt that their conversations were made easier because of their strong relationships with their daughters. Ruth mentioned that she felt that she and Hannah had a very close relationship and could discuss anything, including sexuality.

M: Yeah. If you put it in one word, "Good!" As in it's easy to relate to her, she is filled with me. We talk about everything. Starting from money, and everything else. And her boyfriends and anything else she wants to tell me and anything else she wants to share. You know, sometimes she, she is more like a sister than a daughter, but of course the relationship of mother and daughter is still there. We get mad at each other. She's nineteen now, and it's given that we sometimes disagree and I need to give guidance. We have a good relationship. (Ruth, mother of Hannah, age 19 years)

Daughters' need for advice

Many mothers also mentioned talking to their daughters because they felt their daughter needed advice. For example, Martha (non-biological mother) spoke of recognizing that her sister Shalisa was distressed and needed advice. She ended up sharing information with Shalisa about sexuality after recognizing that she was upset over her boyfriend.

M: Okay. I noticed she wasn't in her usual mood. She was not joking and such. So I said, "Oh. What is the problem? Share with me at least to ease your pain, because crying won't solve the problem." So I took her out...she told me and we shared about it. (Martha, older sister of Shalisa, age 18 years)

Importance of the issue

Many mothers indicated that the importance of the issue they were discussing with their daughter made it easier to communicate. In most cases it was the danger of contracting HIV. Both Bernice and Saba spoke of how they choose to educate their daughters about HIV/AIDS, despite their initial reluctance.

M: The first time I was ashamed to talking with her. But now, it came that it's a must that we tell them. Because if we don't, if I wait...I believe also if they are infected with it, if she gets AIDS, I will also be there to suffer. Because I'm there to care for her. (Bernice, mother of Grace, 15 years old)

M: These days, it was somehow difficult to talk to her about the problems we are facing about these diseases (STIs). You know sometimes we are both shy to tell them something. Because you see, as it is not something good to share with her. But now as the time came, and you see how dangerous it is with them. (Saba, mother of Theresa, age 15 years)

Abundance of sexual health information outside the home

To a lesser extent, some mothers indicated that it was easy to talk with their daughters because they were learning about sexual health outside the home. Saba shared that she felt her daughter's education at school pushed her to start their conversation. Chanya mentioned that she felt that talks in the church helped her to feel more comfortable talking with her daughter Iris.

M: Mostly it is because of school, because I saw that even at school they are taught. So it is good even for me to make more effort, to take more effort in doing it. (Saba, mother of Theresa, age 15 years)

M: I tell you that we talked to them, all of them, even in the church, we talk. We went to the youth and we went to tell them about AIDS, we talk to them to be careful. So, we talk to them. (Chanya, mother of Iris, age 17 years)

Conversation barriers.

Many mothers also indicated that there were challenges in talking with their daughters about sexuality and sexual health. Main barriers were a) daughter-related, b)

mother-related, or c) external. Each of these themes will be discussed in the following subsections.

Daughter-related barriers

Several mothers also talked about difficulties in their conversations related to their daughter. Sub-themes included concerns that the daughter did not understand the content of the conversation or that the daughter did not want to take their advice. Bernice was concerned that her daughter Grace did not understand, but eventually realized that Grace was nervous. Saba was concerned that her daughter Theresa would not abide by her advice.

M: Yeah, the first time it was difficult because I was not sure what she wanted to say, but then it came together and then we just kept on talking and I was told that she was understanding what trying to tell her and she was so frightened.
(Bernice, mother of Grace, age 15 years)

M: ...sometimes you talk some of these daughters and when you talk to them they just agree and say that we are going to try and keep away from those men, but it's just to say it. (Saba, mother of Theresa, age 15 years)

Mother-related barriers

Several mothers shared that they felt uncomfortable talking with their daughters, because they felt the topic was challenging or didn't know where to start. Saba spoke of her own difficulty talking with her daughter Theresa about boys, but noted that it got easier as they talked more. Ruth noted that it was difficult to find a starting point to begin a conversation with her daughter Hannah.

M: Yes sometimes it's difficult because now, like talking to her about her boys, it is something, you feel as if you...it is hard to come from you. At first it was hard, but now just from talking to her today, tomorrow and then another day, then it can not to be very difficult. So now I can sit down with her and talk with her and tell her what is good and what is bad. (Saba, mother of Theresa, age 15 years)

M: And also, its very difficult to sit somebody down and say lets talk about sexual health. You have to go for an entry point where you start with a story. So maybe the starting point was actually, it's always the most difficult. It leads straight to the question. How to start the discussion is the, the most difficult part. (Ruth, mother of Hannah, age 19 years)

External barriers

Some mothers mentioned external barriers to conversations about sexual health.

Elinah spoke of her difficulties stemming from her sister attending boarding school far from her home. Alouch (non-biological mother) spoke of not having a space or materials to talk about sexual health with her niece, Ester.

M: It's just because she's far from me, and most of the time she...At first she was taken to a boarding secondary school. She was far away. Now these to years, in the time she came, in a day school. So they are meeting so many days now. And this year she was so busy with the exams. (Elinah, older sister of Patricia, age 18 years)

M: Because mothers really don't have the type of place to talk and to give them materials. That's the main problem because to our daughters, the main problem, is spirited by "we," we mothers. (Alouch, aunt of Esther, age 19 years)

Sexual Health Knowledge

Mothers were asked to share what they knew about sexual health. In doing so, mothers spoke of both a) HIV/AIDS and b) other STIs. Both of these themes will be detailed throughout this section.

HIV/AIDS.

All mothers spoke of HIV/AIDS and six sub-themes emerged. Sub-themes included i) HIV/AIDS awareness, ii) HIV transmission, iii) HIV risk reduction methods, iv) HIV testing, v) HIV treatment, and vi) HIV myths. Each of these sub-themes will be discussed in the following subsections.

HIV/AIDS awareness

As mentioned, all mothers spoke of HIV or AIDS during the interviews. That said, no mothers gave concrete or detailed definitions of HIV or AIDS. Very few mothers indicated that HIV is a virus, and only Cheryth mentioned that HIV causes AIDS. Mothers were more likely to emphasize that acquiring HIV/AIDS could be fatal, as Sharon mentioned.

M: If you go get that virus for HIV you can get it AIDS. (Cheryth, mother of Mary, age 18 years)

F: Okay, and do you know about HIV and AIDS?

M: HIV? I don't know about that.

F: Okay, so you don't know as much about HIV and AIDS?

M: No, I just know it is a killer disease. (Sharon, mother of Fathiya, age 18 years)

HIV transmission

Many mothers spoke of HIV transmission. For the most part, mothers were aware that HIV could be transmitted through sexual contact, as Judith indicated. Some mothers also mentioned that they knew that HIV could be transmitted through mechanisms other than sex. That said, mothers did not tend to mention multiple modes of transmission. A few mothers noted that HIV could be transmitted through blood, and Saba specifically mentioned transmission through blood transfusion. Some mothers also pointed out that HIV could be transmitted through sharp objects such as needles and razor blades, as Elinah shared.

M: HIV/AIDS, you will get when you do sexual and then when you are with this sick person, you can take it. Yes. (Judith, mother of Bethany, age 15 years)

M: Yes, for the blood transfusion. When somebody is given blood by somebody who is infected and then you get that blood that is infected. When you are given that blood then you are someone that is infected. (Saba, Theresa, age 15 years)

M: What I know is just that they (STIs) are transmitted through sex and that this HIV can be transmitted through sex, things like razor blades, needles. (Elinah, older sister of Patricia, age 18 years)

HIV risk reduction

Nearly all mothers talked about ways to reduce their risk of acquiring HIV. Most mothers focused on abstinence. Sharon shared that others in her community, including her daughter Fathiya, encouraged her to abstain from sex. To a lesser extent, mothers talked about being faithful within monogamous relationships, as Elizabeth shared.

M: At this time, because even them they see the bad things which are plural. Bad things which are around us... They try to tell us not to go out, to play sex with men. Because men, like my husband died at I think 11 years ago, so my brother tries to help me. So I can see when it is good to go out, but even her (Fathiya) is trying to tell me not to go out. So you can see, the Kikuyu don't want the badness or the sickness which is all around. (Sharon, mother of Fathiya, age 18 years)

M: You are only supposed to have one partner because if you have several you might be infected with various diseases, being gonorrhea, syphilis, the HIV/AIDS. (Elizabeth, older sister of Jane, age 18 years)

Mothers also spoke of condoms, though no mothers directly advocated using condoms as a method of risk reduction. Many mothers talked about how condoms were discouraged by their society (culturally and in church). Ruth mentioned that condoms were considered controversial within the Catholic Church and that her culture only discouraged condom use. Elizabeth (non-biological mother) mentioned that she advised her younger sister Jane to abstain because she could not recommend condoms or other contraceptives.

M: Okay, they have, they have this big controversy here about the use of condoms. With the Catholic Church, but (long silence)... Yeah, the church actually teaches about sexual health, but I can't really pinpoint what it says. (Later in interview)

M: So, we can't say what it is like until our society does something about it... Has a people that will deal with it.

F: So do they talk about condoms?

M: Yeah, they do.....as in don't use them! (Ruth, mother of Hannah, age 19 years)

M: Now this is the good thing for her to learn, and to avoid sex, because I cannot tell her to use condoms or contraceptives or what. (Elizabeth, older sister of Jane, age 18 years)

HIV treatment

Some mothers mentioned being aware of treatments for HIV/AIDS and they typically noted antiretroviral treatments (ARVs). Jedida mentioned that ARVs could help individuals live longer, though one was still vulnerable to other illnesses. Zorah, who lives with HIV, mentioned that she had taken ARVs for about five years, and felt that she had been getting better treatment in the last three years.

M: It is a killing disease. It kills so many people. And if you can last, if you to take the ARVs. You can now last some years. But it is very difficult, because when you have HIV and AIDS, you are going to get some many sicknesses. (Jedida, older cousin of Mercy, age 18 years)

M: Me I take ARV. For a while, for maybe five years, here on drugs.
(Later in interview)

M: For three years, I am getting good help...When I have to go to the hospital, the take measurements to see and talk about my health. (Zorah, mother of Ada, age 19 years)

HIV testing

Several mothers mentioned HIV testing. Keturah, who is living with HIV, shared that many people are afraid to get tested, despite their interest in learning more about HIV/AIDS. She also spoke of her own decision to get tested. Saba mentioned her frustration that women seemed more willing to get tested than men.

M: According to here, some of the people affected by these diseases. But everybody shows interest in learning about the diseases. If you don't know, you are afraid of yourself. You take care about yourself. But to be afraid of HIV...even me I go and get the HIV test. (Keturah, mother of Ana, age 15 years)

M: Yes, so many women they agree to go and be tested. They want to get tested because now it is getting ...it is free and there are so many women who are going there for the test, but when they try, so many men they don't, they don't agree. (Saba, mother of Theresa, age 15 years)

HIV myths

Mothers also seemed to endorse misperceptions, or myths, about HIV. Myths included that being married could prevent HIV, that condoms are dangerous, and that one could contract HIV through objects such as clothing and utensils. Each of these myths will be described in the following paragraphs.

Some mothers mentioned that they felt that marriage could prevent HIV. While advising abstinence until marriage was common, some seemed to take the notion further. For instance, Keturah, who was HIV positive, felt that by being engaged or married, an individual would not contract HIV or other STIs.

M: If you are not married or engaged to somebody, you will get the diseases. You or yourself, you cannot do that. You are in love, you have a husband, your faith—you will not get it, just be happy. (Keturah, mother of Anna, age 15 years)

As previously mentioned, several mothers discouraged condom use. Some mothers seemed to believe that condoms were not only socially unacceptable, but actually dangerous. Alouch mentioned that she talked with members of her church about condom use, and noted that condoms were not safe.

M: And we (church members) did talk about [sexuality]. Not about the using condoms, because condoms are not the safe things. (Alouch, aunt of Esther, age 19 years)

Mothers also spoke of preventing HIV by avoiding being clean and avoiding certain objects. For instance, when discussing what she knew about sexual health, Persis mentioned that one could avoid HIV by being “clean” and ensuring that utensils were clean.

M: The importance of being clean. The importance of utensils being clean.
(Persis, mother of Tamara, age 19 years)

Other sexually transmitted infections.

Nearly all mothers mentioned that they were aware of STIs beyond HIV. Within this section STIs other than HIV/AIDS will be referred to simply as STIs. In discussing STIs, several sub-themes emerged related to i) knowledge of STIs, ii) STI symptoms, and iii) STI testing. Each of these sub-themes will be discussed in the following subsections.

Knowledge of STIs

Many mothers mentioned knowing of syphilis or gonorrhea, though none went into detail. For example, Keren mentioned that she had heard of gonorrhea and syphilis, but not the terms “STIs” or “STDs.” Elinah mentioned only that she learned about syphilis and gonorrhea in school.

M: Okay, what I know about the sexual diseases [is] that there are these diseases: syphilis, gonorrhea. We are taught it in school. (Elinah, older sister of Patricia, age 18 years)

F: Have you been taught things about sexual health though? Do you know about STIs or STDs?

M: No.

F: No? Have you heard things about syphilis?

M: I have heard of them.

F: Yeah. What have you heard about it?

M: I've heard about those infectious diseases, such as gonorrhea, syphilis and others. But I never heard of them [the terms STI and STD]. (Keren, mother of Clare, age 15 years)

STI symptoms

Very few mothers discussed STIs symptoms. Jedida mentioned that one could contract a STI via bodily contact with someone that was infected and that sometimes symptoms could be observed. Ruth mentioned the importance of visually screening sexual partners.

M: They are, when get in contact, or the route of transmission, from body contact with those people who have the, the disease, the syphilis or the gonorrhea, They get it from the person who has...maybe they show it, certain things. (Jedida, older cousin of Mercy, age 18 years)

M: You don't see the organs of the other person. You know (cough), I was telling them, sometimes the kind of infections these people have, or any of us might have. If you don't look you don't look you are going to have something very, very strange and very, very serious. (Ruth, mother of Hannah, age 19 years)

STI testing

Persis was the only mother that spoke of STI testing. Persis also gave the most detailed perspective on STIs. She advocated for paying attention to one's sexual health by observing discharge, monthly menstrual cycle patterns—and getting pap smears at the clinic when concerned about symptoms.

M: (silence) Umm, what I know about sexual health? First you must be clean. Secondly, you must be well versed and know the sexually transmitted diseases. STIs, the sexually transmitted diseases. That you should not...let's say you are supposed to be taking your discharge, so that you may know whether you are healthy or not and checking even the smell. And also to be updated on your menstrual dates so that, so that you can know if there is any problem. Or, for instance, if your menstrual comes after 21 days then the next time you have done more days, then there is a problem. Also, these years we have that problem and I also pray there will come a time when you can be having a chance, like here in this dispensary (clinic) you can be having pap smears. (Persis, mother of Tamara, age 19 years)

Cultural and Religious Influences on Sexuality-Related Communication, Knowledge, and Risk Reduction Behaviors

Throughout the interviews, most mothers talked of the influence of a) culture and b) religion on how they communicated with their daughters about sexuality and both their own, and their daughters', knowledge related to sexuality, and risk reduction behaviors. Each of these themes will be detailed in the following sections.

Cultural influences.

When discussing the role of culture, mothers provided rich narratives on a variety of cultural factors that influenced their conversations with their daughters and their knowledge of sexual health. Mothers tended to speak of culture in a general sense, though at times they spoke of tribal culture. Sub-themes were related to i) abstinence, ii) cultural shifts, and iii) a silence around sexual health. Each of these sub-themes will be discussed in the following subsections.

Abstinence

The greatest influence of culture was said to be the promotion of abstinence. In many cases, mothers spoke of how cultural messages about abstinence tended to take a moral tone, often impacting communication and knowledge related to sexuality. For example, Martha spoke of how pre-marital sex was considered “bad” and of how the strong focus on abstinence might dissuade mothers from providing more in-depth sexuality information.

M: [The culture] just say sex is bad before marriage. They don't talk more about sex. I don't know whether they share or don't share with daughters. (Martha, older sister of Shalisa, age 18 years)

Cultural Shifts

Many mothers also spoke of cultural shifts that had recently occurred. With regard to cultural shifts, mothers touched on many issues. Specifically, mothers spoke of changes in cultural practices (female circumcision and polygamy), changes in social roles, and a reliance on schools for sexuality education. Each of these issues will be detailed in the following paragraphs.

Changes in cultural practices: With regard to cultural practices, many mothers also talked about changes in cultural practices of female circumcision and polygamy. Specifically, both female circumcision and polygamy had been common until recently and both are currently discouraged throughout Kenya. Several mothers indicated that they felt the abrupt changes in these practices contributed to many problems. Though these changes in practices were not said to directly impact communication or knowledge related to sexuality, they were said to have an impact in putting people more at risk for acquiring HIV and other STIs. Both practices will be detailed in the following paragraphs.

Regarding female circumcision, several mothers seemed to feel that lack of circumcision was leading young women to become more promiscuous. Keturah shared that during her time circumcision enabled women to be viewed as respectable and mature. But now that circumcision is discouraged, Keturah felt that young women were engaging in premarital sex more frequently. Elizabeth and Elinah echoed a similar sentiment. Only Alouch spoke of the negative consequences of female circumcision.

M: According to the older people, like our mothers, they tell us not to do sex before getting married. They caution us not to do that. But at the same time, to be in the stage which makes somebody to be a grown-up, to be respected you, go get circumcision. But now-a-days, that tradition or custom, the girls at the age of 16 years, they go and do circumcision and say we are a grown-up, now we can get married! But really a lot of girls switched and are not getting circumcision. Now we are begging our children not to have sex before they get married. Some of them use condoms! They buy the condoms at the stores. So they are playing sex. (Keturah, mother of Anna, age 15 years)

M: But in the other days it was not like that. There was girls' circumcision and boys' circumcisions, so they could keep away from sex until marriage. (Elizabeth, older sister of Jane, age 18 years)

M: [long pause] Okay, long time ago, at our age, girls were getting circumcised. That time they were saying a girl that was circumcised, she won't go hanging

with the men. “She don’t have that heat.” (laughter) To have men. But now-a-days, they are not. (Elinah, older sister of Patricia, age 18 years)

M: A lot of people usually say, “You are supposed to be circumcised.” But people now, they come to your daughter not to be circumcised. Because you are going to ruin her sexual parts and at the end of the day she will not be stimulating her. She is going to ignore her husband. There will come a time when that is done. You will feel fear, you will feel pain. So you can escape. For me, they have started to say, “If you circumcise a girl, you are going to ruin her. (Alouch, aunt of Esther, age 19 years)

Mothers also spoke of changes in the practice of polygamy. Some felt that the new emphasis on monogamy created a stigma and silence about having multiple partners. For example, Elizabeth elaborated that the emphasis on monogamy makes it difficult to discuss the fact that many men are engaging in sex with multiple partners.

M: Okay, in the early days the man is marrying so many wives. They would have maybe five—two or three wives. So those ones could live with one man, but nowadays the men have started marry one woman but they are moving out, you cannot trust them. And they don’t want to hear that you are not trusting the man. So they marry you and put in the house and you come to find that he has other friends outside. So we are just staying like that because we don’t have any provision because if she comes and telling you these, he’ll start beating you. So they don’t accept that they have other women outside. So it’s a problem. (Elizabeth, older sister of Jane, age 18 years)

Changes in social roles: With regard to changes in social roles, some mothers spoke of how social roles had transformed, making it difficult to communicate about sexuality. For instance, several mothers spoke of how there was no longer a designated family member (typically the grandmother) to talk about sexual issues. This seemed to make it more difficult to communicate with daughters about sexuality, as Persis noted.

M: Well our customs, a long time ago, girls were being advised (on sexual health) by their grandmothers. But now-a-days they don’t...

F: They’re not advised by anyone?

M: Yeah. And they, according to my experience, they think it is something...what I’m I trying to say...something that is not good. Yeah. (Persis, mother of Tamara, age 19 years)

Reliance on schools: Mothers also spoke of the influence of schools. Specifically, some mothers mentioned that parents relied on schools to teach about sexuality, rather than educating youth themselves, as exemplified by Elizabeth. Elinah mentioned that boarding schools pulled children out of the home for long periods of time, making it difficult for family members to discuss sexuality with youth.

M: No, because nowadays the parents are not taking their responsibilities. So most of the children are now getting the guidance and counseling in schools. (Elizabeth, older sister of Jane, age 18 years)

M: Okay, our culture, you see I'm a Kikuyu. Before the time of our grandfathers, girls went in the kitchen with their mothers, and boys with their fathers. Now, we are telling them sex is not good before marriage. What and what... But now you see we are civilized but the civilization we have is not enough because we are taking children to boarding school, we are not attending to them. There are some things we are not telling them. (Elinah, mother of Patricia, age 18 years)

Silence around sexuality

With regard to a cultural silence around sexuality, several mothers mentioned that it was taboo to discuss sexuality in their culture, making it difficult to have conversations about sexuality. Furthermore, these constraints on sexuality communication were also said to impact knowledge. Martha shared that her culture only tends to emphasize abstinence, rather than more comprehensive sexuality education. Ruth shared a very detailed perspective, mentioning that her tribe tended to be silent on matters of sexual health and spoke of the direct impact it had on her students' knowledge of sexuality.

M: They just say sex is bad before marriage. They don't talk more about sex. (Martha, older sister of Shalisa, age 18 years)

M: Silence Sexual health... Can I say they are silent? [laughter]... I think they are silent. Although, you know, in the tradition of society, like these days when you talk about your culture we have become very mixed. Our culture has become very mixed. But, if I could talk about tradition, sexual health is highly encouraged. And casual sex is not encouraged. And it was actually punished really high. So we cannot say they were caring about sexual health. But if there are some sexual

diseases they were not publicized as such. But if you talk today, about our culture in Kenya, it is mixed up in a lot of things. A lot of modern stuff that you cannot call even culture. So maybe, the society where you are living that is what you can call culture.

But maybe I can talk about my experience with the students I was teaching. I was dealing with the middle aged girls, Form Three. Just a bit more than...averaging [age] 16 to 18. That is the class that I was teaching. And when we came to sexuality, who I am, the group, they don't know anything. They asked so many questions. It took about four sessions to deal with that, the sexual self, the physical sexual self. Like four sessions to deal with that, like four sessions. That is four weeks and many, many questions. Which tells you that nobody talks to them about it. They talk amongst themselves. And apart from what they get from TV and stuff like that. They really don't have knowledge of the sexual health stuff like that. So, I guess that's the way society is. (Ruth, mother of Hannah, age 19 years)

Religious influences.

Most mothers mentioned that they felt that their religion had an impact on their conversations with their daughters, their sexuality-related knowledge, and their sexual risk reduction decisions. In most cases, they talked about how the church disseminated prevention-related messages via workshops and seminars. Specifically, churches were said to promote a) abstinence and b) monogamy, and to c) discourage condom use. Both themes will be expanded on in the following subsections.

Abstinence

Many mothers noted that their churches promoted abstinence from sexual activity until marriage. Mothers were also likely to note that their churches provided information on abstinence that they could impart to their daughters, as Elinah mentioned. Judith (non-biological mother) shared that her church advised abstinence, and that she reiterated the messages of the church to her niece, Bethany. Mothers also noted that churches shared information about abstinence that helped reinforce their preventive decisions, as Sharon shared.

M: Okay, in my religion first we are given seminars about these diseases. Now after the seminars we are taught that if it's a girl who is not married, they wait until they get married, but sex before marriage is prohibited. (Elinah, older sister of Patricia, age 18 years)

M: They (church) are saying that [sex is] not a good thing because when those small children start to do that sexual, they can take some diseases and it is not good...they will be pregnant and is not good. So I'm telling her, you choose to be Christian because in church we Christian are waiting to be married. (Judith, aunt of Bethany, age 15 years)

M: For them (daughters), they talk about leaving sex. So even them, when the pastor is reading the word of God to us, he tries to teach that it is not a good thing. For them it is not a good thing. (Sharon, mother of Fathiya, age 18 years)

Monogamy

To a lesser extent, mothers also spoke of their churches educating them on monogamy. For instance, Bernice mentioned that her church promoted the notion of being faithful to one partner. It was not clear whether, based on this, mothers were practicing monogamy as a risk reduction method.

M: Our religion is just that they tell us just to be faithful to my partner. I think that is what they are teaching us to do. (Bernice, mother of Grace, age 15 years)

Condom use

Some mothers also noted that their churches tended to denounce condom use. Keren noted a discrepancy between messages about condoms between her community and her church. She felt that members of her community promoted condom use, along with contraception, but that her church discouraged both. Therefore, she chose abstinence and promoted it within her own family.

M: Some of the community or society [members], they teach about how people use condoms, contraceptives, those things. But you know my church they say no. So you have to prevent it by abstaining. (later in interview)

I am proud of it, that I have abstained with my family, and I pray God to help me and to guide me and to go on being in that situation (abstinence). (Keren, mother of Clare, age 15 years)

Mother-Daughter Comparative Analysis Results

Comparisons of mother and daughter main themes were analyzed using a comparative analysis approach and utilizing meta-matrices. Below, the main findings are summarized in a comparative analysis table that demonstrates where main themes and sub-themes among mothers and daughters converged and diverged. The results are divided among cross-case analysis sections, including 1) mother-daughter communication about sexuality, 2) knowledge of sexual health, and 3) cultural and religious influences on sexuality-related communication, knowledge, and risk reduction behaviors.

Within the first section related to mother-daughter communication about sexuality, contents are sub-divided among narrative components (e.g., Start of the Conversation). In all sections the left column indicates main themes from mothers and daughters based on the cross-case analyses. Sub-themes are indicated with by indentation below main themes. For instance, under the main theme “Strong Catalyst” various catalyst-related sub-themes, including “rape-related incidents” are listed below the theme and indented.

In the right column, pluses and minuses indicate similarities and differences among themes, with daughter themes indicated first, then mother themes. For instance, in the right column, the theme “Strong Catalyst” is followed in the left column by (+/+). This indicates that both the mothers and daughters indicated that conversations began in relation to strong catalysts. Under the sub-theme of “Sexual Health Concerns,” the right

column shows (+/-), indicating that daughters reported this sub-theme and mothers did not. Each of these convergences and divergences in themes will be discussed following the comparative analysis table.

Table 1: Mother-Daughter Comparative Analysis

<i>Mother-Daughter Communication about Sexuality</i>	
	Start of the Conversation
Strong Catalyst	(+/+)
Rape-related Incidents	(+/+)
Problems with Romantic Partners	(+/+)
Sexual Health Concerns	(+/-)
Sexual Risk-taking Behaviors	(+/+)
Exposure to Someone Living with HIV/AIDS	(-/+)
Knowledge Seeking	(+/+)
Exposure to New Knowledge	(-/+)
Daughters Developmental Phase	(-/+)
	Content of Conversation
Messages	(+/+)
Risks of HIV/AIDS	(+/+)
Pregnancy	(+/+)
Hygiene	(-/+)
Advice	(+/+)
Abstinence	(+/+)
Ongoing Communication	(+/-)
HIV Testing	(+/+)
Visually Screening Partners	(-/+)
	End of the conversation
Mother-Ended Conversations	(+/+)
Daughter-Ended Conversations	(+/+)
Value of Conversations	(+/+)
	Conversation Facilitators
Strong Relationship	(+/+)

Mothers' Knowledge and Insight	(+/-)
Importance of the Issue at Hand	(+/-)
Daughters' Need for Advice	(-/+)
Abundance of Sexual Health Information Outside the Home	(-/+)
	Conversation Barriers
Daughter-Related Barriers	(+/+)
Daughter Uncomfortable	(+/-)
Concern that Daughter Did not Understand	(-/+)
Concern that Daughter Would Not Take Advice	(-/+)
Mother-Related Barriers	(+/+)
Concern that Mother Would get Upset	(+/-)
Concerned that Mother Lacks Knowledge	(+/-)
Mother Felt the Topic was Challenging	(-/+)
Mother did not Know How to Start	(-/+)
External Barriers	(-/+)
<i>Knowledge of Sexual Health</i>	
HIV/AIDS Knowledge	(+/+)
Awareness of HIV/AIDS	(+/+)
HIV Transmission	(+/+)
HIV Risk Reduction Methods	(+/+)
HIV Treatment	(+/+)
HIV Testing	(+/+)
HIV Myths	(+/+)
STI (other than HIV) Knowledge	(+/+)
Awareness of STIs	(+/+)
STI Symptoms	(+/+)
STI Testing	(+/+)
STI Treatment	(+/-)
<i>Cultural and Religious Influences on Communication, Knowledge, and Risk Reduction Behaviors</i>	
Cultural Influences	(+/+)
Encourages Abstinence	(+/+)
Encourages Communication with Mothers	(+/-)

Promotes a Silence around Sexuality	(+/-)
Promotes Risky Cultural Practices	(+/-)
Religious Influences	(+/-)
Encourages Abstinence	(+/-)
Encourages Communication with Mothers	(+/-)
Encourages Monogamy	(-/+)
Discourages Condom Use	(-/+)

For the most part, themes from daughter and mother cross-case analyses converged in most areas related to 1) mother-daughter communication about sexuality, 2) knowledge of sexual health, and 3) cultural and religious influences on communication, knowledge, and risk reduction behaviors. There were also themes from mothers and daughters' cross-case analyses that diverged. The following sections will detail both convergent and divergent relationships among mother and daughter themes related to each of these areas.

Mother-Daughter Communication about Sexuality

With regard to mother-daughter communication about sexuality, both daughters and mothers shared similar themes related to the narrative components of the conversation. Narrative components included the a) start of the conversation, b) content of conversation, c) end of conversation, d) conversation facilitators, and e) conversation barriers. Patterns among themes related to each of these narrative components will be discussed in the following subsections.

Start of the conversation.

Mothers and daughters indicated that both were likely to initiate the conversations. Moreover both also noted that conversations tended to begin in light of a variety of strong catalysts, and to a lesser extent, in relation to knowledge seeking (i.e.,

mother or daughter seeking knowledge about sexuality). Mothers also made a unique contribution, noting that some conversations started in light of exposure to new knowledge about sexual health and because they felt their daughter had reached a developmental phase where it was important to discuss sexuality.

Content of the conversation.

With regard to the content of conversations, both daughters and mothers shared that mothers imparted messages and advice on sexuality. Sub-themes that converged were messages related to the risks of HIV/AIDS and pregnancy. Mothers also spoke of sharing messages related to hygiene. With regard to advice, abstinence and HIV testing were two sub-themes that converged. There were also several themes that diverged. Specifically, daughters also noted that mothers advised on-going communication about sexuality. In addition, mothers noted that they advised visually screening partners for STIs.

End of conversation.

In discussing the end of conversations about sexuality, three themes converged and there were no divergent main themes. Primary themes that converged included that conversations were ended by mothers and by daughters. Furthermore, when reflecting on the conversations, both mothers and daughters noted that daughters valued the conversations.

Conversation facilitators.

When speaking of factors that helped facilitate conversations, both mothers and daughters mentioned that their strong relationship and the importance of the issue at hand helped them to engage in conversations. Mothers and daughters also diverged with

regard to three themes. Daughters noted that their mother's knowledge and insight helped facilitate conversations. Mothers noted that both their daughters' need for advice and the abundance of sexual health information outside the home facilitated conversations.

Conversation barriers.

Two themes converged when discussing conversation barriers. Specifically, both mothers and daughters noted that some barriers were daughter-related and that some were mother-related. Additionally, mothers made a unique contribution of indicating that there were external barriers (physical and geographic) to communication about sexuality.

Knowledge of Sexual Health

With regard to knowledge of sexual health, daughters and mothers seemed to have similar levels of awareness and understanding. Both spoke about sexual health topics related to HIV/AIDS and STIs. Mother and daughter associations to each of these themes will be detailed in the following subsections.

HIV/AIDS.

When imparting their own HIV/AIDS knowledge, mothers and daughters converged on all themes. All daughters and mothers articulated a basic awareness of HIV/AIDS. To a lesser extent, both spoke of a variety of HIV-related issues including: HIV transmission, HIV risk reduction methods, HIV treatment, and HIV testing. Lastly, both mothers and daughters tended to individually endorse a variety of HIV myths.

Other sexually transmitted infections.

When discussing their knowledge of STIs other than HIV, themes were very similar to those related to HIV/AIDS. Both mothers and daughters converged in most

areas, including a basic awareness of STIs, STI symptoms, and STI testing. In addition, daughters made the unique contribution of speaking of STI treatment.

Cultural and religious influences on communication, knowledge, and risk reduction behaviors

During interviews, both mothers and daughters spoke of influences on sexuality-related communication, knowledge, and risk reduction behaviors. Specifically, mother and daughter themes converged in relation to cultural and religious influences. Each theme will be detailed in the following subsections.

Cultural influences.

With regard to cultural influences, sub-themes converged related to the cultural promotion of abstinence, a silence around sexuality, and risky cultural practices. Sub-themes also diverged in two areas. Daughters also noted that their culture encourages communication with their mothers.

Religious influences.

When speaking of religious influences, one sub-theme converged among mothers and daughters. Specifically, both noted that their religion or church encourages abstinence. There were also three divergent sub-themes. Daughters noted that their religion encourages communication with mothers. Mothers imparted that their religion encourages monogamy and that it discourages condom use.

CHAPTER IV

DISCUSSION

The purpose of this study was to explore rural Kenyan mother and daughter communication about sexual health in order to better understand how it can facilitate sexual risk reduction. For a holistic exploration, the study also investigated who daughters communicate with about sexuality, mother and daughter knowledge of sexual health, and daughter sexual risk reduction behaviors.

Nineteen dyads of mothers and daughters participated in this study. *Daughters* were young women aged 15 to 19 years that spoke English and resided in or around Thigio, Limuru, Kenya. *Mothers* were biological mothers or primary care givers, who also spoke English, and resided in the Thigio area.

Each participant took part in an individual in-depth qualitative interview that was developed to gain an ecological perspective on the manner in which mothers and other external factors impacted daughter's sexual risk reduction behaviors. Interview questions were informed by the Parent-Based Expansion of the Theory of Planned Behavior (PETPB) model and incorporated both phenomenological and narrative frameworks.

This chapter will build upon the results of the previous chapter. Main findings from both daughter and mother cross-case and comparative analyses will be presented and related to relevant prior research findings. In addition, implications, strengths and limitations, and directions for future research will be discussed. Finally, an afterward will address additional events and perceptions.

Summary of Main Findings

Key findings of this study resulted from a combination of narrative and phenomenological analyses, employed to ascertain a comprehensive view of the manner in which mothers influence daughters' risk reduction strategies. Main themes were organized in relation to the research questions of the study, including 1) who daughters talk to about sexuality, 2) mother and daughter communication about sexuality, 3) what both mothers and daughters know about sexual health, and 4) daughters' sexual risk reduction behaviors. The following sections highlight important findings in relation to each research question, link them with prior research findings, and then draw conclusions related to the PEPTB framework.

Daughter Communication about Sexuality

Daughters were asked who they communicate with about sexuality to better understand influences on daughters' normative beliefs about sexuality and sexual risk reduction. Daughters reported discussing sexuality with a variety of individuals (i.e., mothers, other family members, friends and peers, their romantic partners, and adult professionals). These results are consistent with prior studies that surveyed young Kenyan women and found that they reported talking to a variety of people about sex (Kigaru, Obwaka, Odallo, & Van Hulzen, 1996; Obare, Agwanda, & Magadi, 2005).

In contrast to the present study, both Kigaru et al. (1996) and Obare, Agwanda, and Magadi (2005) also found that substantial proportions of youth did not talk with their mothers or anyone, respectively. Obare, Agwanda, and Magadi (2005) also found age differences (12 to 15 years versus 16 to 19 years) in who young women communicate with, with younger women being more likely to speak with their mothers. The present

study interviewed young women in more narrow age range (15 to 19 years) and differences by age were not apparent.

The qualitative nature of the present study allowed for a more contextualized understanding of these normative influences. The most salient themes included communication with mothers and peers (including romantic partners), indicating that these normative referents (i.e., those that have an influence on normative beliefs), in particular, may have the greatest impact on daughters' beliefs and ultimately their behavioral choices. Moreover, details emerged with regard to communication with both mothers and peers. Specifically, daughters noted that mothers influenced their behavioral decisions by helping them to distinguish between "good" and "bad" behavior. With regard to communication with peers, daughters reported conflicting experiences. Specifically, many daughters enjoyed educating peers on sexual issues; however, they also felt their peers (especially boyfriends) pressured them to engage in sexual activity. Taken together, these findings indicate that mothers have the potential to exert a strong influence on their daughters' sexual risk reduction behaviors, yet it is important for mothers to discuss various risk reduction strategies with their daughters in light of the strong peer pressure to engage in sexual activity.

Mothers-Daughter Communication about Sexuality

Both mothers and daughters were asked to share stories about a time they talked about sexuality to understand the manner in which mother-daughter communication about sexuality influenced daughters' beliefs about sexuality and sexual health, as well as their sexual risk reduction behaviors. The narrative approach allowed for mothers and daughters to share rich accounts of their experiences communicating about sexuality and

comparative analysis captured convergent and divergent themes related to the components of the conversations.

Start of the conversation.

A principal finding was that many conversations were instigated by a strong catalyst. Mother and daughter themes converged in mentioning a variety of impetuses, including rape, problems with romantic partners, and sexual risk-taking behaviors. These findings indicate that, unfortunately, many mother-daughter conversations occur in reaction to events that put daughters at risk. In doing so, opportunity for primary prevention education may be lost. Moreover, the charged nature of the situation may impact mothers' responses. For instance, in one case, a daughter mentioned that she was threatened with rape and the mother responded by lecturing her about abstinence. It is possible that the mother's response was evoked by her affective state after learning about her daughter's experience and was not well thought out.

That said, it is also possible that the mother responded in that manner because it is difficult to address rapes in the Thigio community and elsewhere throughout Kenya. During the second member-checking phase of analysis, when preliminary results were presented to women that participated in the study, rape became the primary issue of focus. Participants mentioned that rape was common in their community and that they felt powerless to address the issue.

Elsewhere, several aforementioned studies have captured the high incidence of rape and young women's lack of control in sexual situations in Kenya (Maticka-Tyndale et al., 2005; Nzioka, 2001; Toroitich-Ruto, 1997). In addition, the Joint United Nations Programme on HIV/AIDS (UNAIDS) published a report in 2006 focused on the high

incidence of violence against girls and women in Kenya and its relation to the spread of the HIV/AIDS epidemic (UNAIDS, 2006b). The authors noted that 46% of women and girls reported one or more incidents of sexual abuse during their childhood. Additionally, 25% of 12-24 year olds lost their virginity by force. Taken as a whole, these findings indicate a high prevalence of coerced and forced sex throughout Kenya. Moreover, the UNAIDS (2006) report noted that over 60% of women had never reported acts of physical or sexual abuse to *anyone*, which indicates that formal mechanisms to address rape in Kenya are difficult to negotiate.

To a lesser extent, conversations were also said to be started deliberately. Mother and daughter themes converged in relation to knowledge seeking, wherein both turned to one another with questions about sexuality. Mothers also noted that they started conversations after learning something new about sexuality or because they felt that their daughter had reached a developmental phase at which it was important to discuss sexuality.

There is some evidence that deliberate motives offer a greater opportunity for prevention. Rosenthal, Feldman, and Edwards (1998) conducted a qualitative study on United States (US) mothers' perspectives on communication about sexuality and the results indicated that mother-child conversations spurred by a strong catalyst had little impact on adolescents, compared to those that were more deliberate. The authors identified five communication styles: avoidant, reactive, opportunistic, child-initiated, and mutually interactive. Importantly, reactive styles were typically initiated after "pressing issues" (e.g., concerns with a child's romantic partner) that were similar to the strong catalysts identified in the present study. Reactive styles were associated with less

frequent one-sided communication (on the part of the mother) that covered a limited range of topics and offered little practical advice. Reactive styles were also associated with unresponsiveness on the part of the adolescents. To the author's knowledge, no Kenya-based studies have investigated various parent-child conversation impetuses or their impact on content of conversations about sexuality.

Content of conversation.

With regard to the content of conversations, mother and daughter themes converged in relation to common messages that mothers imparted during conversations about sexuality. Specifically, both spoke of mothers emphasizing the risks related to HIV/AIDS (e.g. that "AIDS is a killer disease"), and daughters noted that it was the primary focus of sexuality-related messages. In fact, several daughters mentioned that their mothers spoke of nothing beyond the risks of HIV/AIDS. Both mothers and daughters also spoke of mothers focusing on unintended pregnancy and only mothers spoke of messages related to hygiene. These findings are somewhat consistent with prior literature on Kenyan mothers' sex-related messages. Njau and Meme (1997) identified issues mothers were most comfortable discussing with their children. With regard to sexuality, mothers were said to be most comfortable discussing boy-girl relationships with their daughters (often advising them to avoid those types of relationships entirely) and to a lesser extent "diseases like HIV/AIDS." The authors noted that mothers rarely discussed other issues related to sexuality with their daughters.

Mothers and daughters also converged on themes and sub-themes related to advice. Both mothers and daughters imparted that abstinence was the principal form of advice conveyed by mothers, and other forms of advice (e.g., avoiding men, pursuing

education, etc.) seemed to be mentioned to reinforce messages of abstinence. Moreover, mothers were rarely said to have conveyed in-depth sexual health information to their daughters, such as various forms of sexual risk reduction methods. While abstinence is the only method of complete avoidance of sexual risk, it is not always feasible, as some daughters mentioned. Moreover, by solely focusing on abstinence, opportunities to learn about other forms of risk reduction are impaired. For instance, both mother and daughter themes converged with regard to advice on HIV testing, yet HIV testing was primarily recommended during or after marriage.

Both national and local studies have found young women in Kenya are highly aware of abstinence, but other risk reduction messages are less familiar. As part of a national study, the Kenyan Ministry of Health (MOH) found that the vast majority of young women knew about abstinence, but that less than two-thirds were aware that faithfulness to an uninfected partner could prevent HIV, and less than one-third knew about condoms (MOH, 2005b). More recently, Lillie, Pulerwitz, and Curbow (2009) utilized quantitative and qualitative methods to survey 1,375 Kenyan youth in schools in the Nakuru district of Kenya about their prevention knowledge. Results indicated that youth were by far most familiar with prevention messages related to abstinence. Nearly half of the youth displayed full comprehension of abstinence, compared to 20% understanding the message of “being faithful,” and 7% comprehending “consistent condom use.”

In addition, with regard to advice related to abstinence, mothers tended to equate premarital sex with “bad” behavior. Such moralizing may intensify sex-negative messages about sexuality, and may reinforce negative stereotypes about young women’s

sexual behavior. Kenyan studies have shown that young women tend to be chastised for premarital sexual behavior. Nzioka (2001) conducted focus groups with adolescents and found that both young women and men indicated negative perspectives of young women who engaged in premarital sex, but the same was not true for young men. Ajayi et al. (1991) noted contradictions in adolescents' attitudes about premarital sex and their behaviors. Their quantitative study involved unmarried youth (12 to 19 years) and found a majority of participants disapproved of premarital sex, and that young women were more likely to disapprove than young men. At the same time, the authors also found that the majority of participants had engaged in premarital sex, though fewer young women reported doing so. The mean age for first sexual experience was 13 years among young men and 14 years among young women. Taken together, these previous research findings indicate that premarital sex, though relatively common, is pathologized, particularly among young women.

Moralizing and pathologizing premarital sex may further inhibit meaningful education and communication from occurring. If young women are not “supposed” to engage in sex, mothers may assume that there is no need to educate them on various risk reduction methods. This may have had a profound impact both on daughters' attitudes about sexuality and, likely, on their risk reduction behaviors. Njau and Meme (1997) also found that young women in Kenya reported needing in-depth information on HIV and pregnancy-related risk reduction methods, yet mothers tended to impart limited messages focusing on abstaining from sex until marriage and avoiding men.

These findings may also be reflective of a variety of factors, including some related to cultural and religious messages. During the comparative analysis phase of this

study, it was evident among both mothers and daughters that abstinence was strongly encouraged within their culture and their religion. These external influences may have further constrained more comprehensive messages about sexuality, including faithfulness to one partner and condom use.

With regard to cultural messages, these may have been reinforced by international funding that constrained messages about sexuality. Specifically, the United States Presidents Emergency Plan for AIDS Relief (PEPFAR), launched in 2003, is the largest international public health initiative aimed at a single disease that any nation has ever undertaken, and has provided extensive funding to Kenya (US PEPFAR, 2009). From 2003 until a 2008 reauthorization, one-third of all PEPFAR prevention funds were mandated toward abstinence programs. Moreover, PEPFAR funding prioritized an “ABC” (abstinence, be faithful to one partner, and consistent condom use) message, but emphasized abstinence and faithfulness messages and restricted promotion of condoms among youth (United States Government Accountability Office, 2006). It is also important to note that since 2008, funding requirements have expanded and therefore other risk reduction messages may have opportunity to reach young Kenyan women in the future (Library of Congress, 2010).

With regard to religion, unfortunately, to the author’s knowledge there are no publications focused on the influence of religion on sexual risk reduction in Kenya. That said, a 2007 World Bank policy and research report indicated that churches can constrain sexual risk reduction messages because of inherent moral beliefs about sexuality that undermine comprehensive messages about sexuality. The authors advocated for the education of religious leaders on comprehensive risk reduction methods (World Bank,

1997). Moreover, in 2009, on his first visit to Africa, Pope Benedict XVI made a proclamation encouraging abstinence and monogamy, and insinuating that access to condoms increases the risk of HIV/AIDS (Green & Hearst, 2009). Given that a fair amount of the Kenyan population is Catholic (as were many participants in the current study), it seems likely that religious messages may have impacted mothers' and daughters' attitudes and sexual risk reduction behaviors.

End of conversation.

In reflecting on the end of conversations, mother and daughter themes converged and indicated that daughters valued the conversations with their mothers. Moreover, many daughters indicated that they intended to follow their mother's advice. Other studies have found similar results, including that Kenyan youth find parents very useful in coping with sexual matters (Toroitch-Ruto, 1997) and that youth are comfortable discussing sexuality with a same-sex parent (Kigaru et al., 1996). This finding further emphasizes mothers' roles as key normative referents that can have a great deal of influence on daughters' attitudes and sexual risk reduction behaviors.

Conversation facilitators.

Both mothers and daughters also discussed a variety of facilitators of communication about sexuality. A main finding was that both mothers and daughters felt that their strong relationship helped facilitate conversations. In addition, daughters noted that they felt that their mothers' knowledge and insight was also a facilitator. These findings further indicate that mothers can play a central role in educating their daughters and impacting their attitudes, intentions, and behaviors.

Conversation barriers.

Both mothers and daughters also noted barriers to communication about sexuality. While both spoke of factors that were mother and daughter-related, an important finding was that daughters provided a unique contribution in noting that they felt their mothers lacked the knowledge and skills to impart meaningful information. Mothers also tended to note that they found the conversations challenging and several were unsure about how to start the conversations. Prior studies of Kenyan mother-daughter communication have identified similar barriers to conversation. For instance, both Njau and Meme (1997) and Mbugua (2007) conducted qualitative studies and found that mothers did not have adequate sexual health knowledge to impart meaningful sexual health information to their daughters. Mbugua (2007) also found that inhibitions due to European Christianity were barriers to sexuality education. Phenomena identified in both studies were somewhat evident in the present study, wherein both religious-based reticence and low levels of sexual health knowledge (discussed in the next section) may have posed barriers to meaningful conversations.

Knowledge of Sexual Health

Both mothers and daughters were asked to share what they knew about sexual health, in order to identify their level of knowledge related to sexual health. In addition, this question was asked to gain some understanding of the manner in which external factors (including mothers) influenced daughters' knowledge and understanding of sexual health and possibly their beliefs and intentions related to sexual risk reduction behavior. Key findings indicated high levels of convergence among mother and daughter themes, in that both had low levels of sexual health knowledge, particularly with regard to risk

reduction methods. Another main finding included that many mothers and daughters endorsed myths about HIV.

Most information provided by both mothers and daughters reflected basic rather than in-depth knowledge. Both mothers and daughters primarily spoke of a basic awareness of HIV and other sexually transmitted infections (STIs) and did not articulate in-depth understanding. These findings are consistent with Toroitich-Ruto (1997) and Njau and Meme (1997) who found that both young women and mothers in Kenya had high levels of basic knowledge, but low levels of in-depth comprehension. These findings seem reinforce results of Njau and Meme (2007) that found that low levels of sexual health knowledge on the part of mothers served as a barrier to mother and daughter communication about sexual health. In the case of the present study, it seems possible that mothers did not tend to provide in-depth education or advice during conversations with their daughters because they were not educated enough to do so. This may have in turn constrained daughters' knowledge related to sexual health and ultimately their sexual risk reduction behaviors.

Low levels of sexual health knowledge were further reflected in mothers' and daughters' discussions of risk reduction methods. Both mothers and daughters primarily focused on abstinence as a main form of sexual health-related risk reduction. In addition, only mothers cited monogamy, and both mothers and daughters tended to note that condoms were not an effective method of risk reduction. Each of these findings will be further discussed in the subsequent paragraphs.

With regard to abstinence as a primary form of risk reduction, these findings give further detail about the manner in which mother-daughter communication about sexuality

may have been impacted by knowledge. Mothers seemed to have limited knowledge related to risk reduction methods other than abstinence and they primarily advised their daughters to abstain during mother-daughter conversations about sexuality. Moreover, both mothers and daughters noted that abstinence was promoted by both their culture and religion. These external influences may have also influenced mothers' and daughters' knowledge and reinforced notions that abstinence is the most appropriate form of sexual health-related risk reduction.

With regard to monogamy, it is important to note that this was a key area that mother and daughter themes diverged. It was the only other form of risk reduction advocated by mothers and daughters did not tend to speak of monogamy. Importantly, comparative analyses also indicated that mothers felt that their religion emphasized monogamy, whereas daughters did not.

This finding further indicates that messages related to monogamy, or faithfulness to one partner, are not reaching young women. Moreover, this finding builds upon the notion that abstinence was viewed as an *appropriate* method of risk reduction for daughters. Messages of monogamy seem to be directed toward older women, possibly because young women are not supposed to engage in premarital sex. This finding is problematic, particularly when national studies have indicated that young women are engaging in premarital sexual activity (Ajayi et al., 1991; CBS, MOH, & ORC Marco, 2004; MOH, 2005b; MOH, 2009). This may explain, in part, why young women in the present study and in national studies (e.g., CBS, MOH, & ORC Marco, 2004; MOH, 2005b) have low levels of knowledge of risk reduction methods, including monogamy, when compared to older women. This finding indicates that the dearth of comprehensive

knowledge of risk reduction methods among daughters may be impacted by low levels of knowledge among mothers and limited religious messages.

With regard to condoms, comparative analysis also indicated that mother and daughter themes converged in this area, wherein both reported a high level of awareness of condoms. That said, most mothers and daughters disapproved and spoke avidly against condom use. With regard to previous literature, national studies in Kenya have also found a high mistrust of condoms, despite that condoms have been found to be extremely effective in preventing STIs (Centers for Disease Control and Prevention, 2010). For instance, the Kenya Demographic and Health Survey 2003 found that about half of young women felt that condoms were ineffective in preventing HIV/AIDS and only about 10% reported using a condom during their first sexual experience (CBS, MOH, & ORC Marco, 2004). Moreover, Njau and Meme (1997) found that many mothers did not believe condoms were an appropriate prevention method and were concerned that discussing condoms would instigate promiscuity. The authors also found that mothers held negative attitudes about condoms that were also endorsed by their daughters. An additional unique finding of the present study was that mothers also noted that their churches tended to disseminate messages that condoms were not appropriate or were not safe and that these messages guided their decisions to impart anti-condom information to their daughters.

These anti-condom beliefs and messages may have ultimately influenced daughters' sexual risk reduction decisions, as research in the US has indicated that mothers who discuss condom use can play a key role in encouraging youth to use condoms. Miller et al. (1998) found that mother-child communication about condom use,

prior to the child's first sexual experience, led to increases in condom use during their first sexual experience. Hutchinson (2002) also found that young women that reported comprehensive communication with their mothers were more likely to report consistent condom use. Hutchinson, Jemmott, Jemmott, Braverman, and Fong (2003) found that mother-daughter communication decreased the likelihood of engaging in sexual intercourse and increased condom use among participants.

Mothers and daughters also converged in relation to their endorsement of HIV-related myths (e.g., transmission via utensils and that sexual activity can cause HIV). These findings are consistent with prior national research that has indicated that many Kenyans still hold these misperceptions (CBS, MOH, & ORC Marco, 2004; MOH, 2005b; MOH, 2009). One myth that was particularly relevant to the present study was that many participants seemed to believe that sexual activity could cause a STI. It is important to note that HIV and other STIs are transmitted via sexual activity. That said, it seemed that many mothers and daughters did not fully understand that the act of sex alone does not cause STIs. Specifically, by using protection and/or having sex with an uninfected partner, one's risk of contracting a sexually transmitted infection is extremely low or nonexistent.

Herek, Widaman, and Capitanio (2005) also found that adults in the US held similar confusion about STI transmission. The authors found that over a fifth of participants thought HIV could be transmitted through protected sex between uninfected partners. The authors also inferred that correlating the act of sex alone with sexually transmitted infections may stigmatize sexual activity. Although this was not directly articulated in the present study, it seems possible that this notion underpins negative

messages about sexuality and may influence both daughters' attitudes and sexual risk reduction behaviors.

Daughters' Sexual Risk Reduction Methods

Daughters were asked what they do to protect their sexual health, as a means of assessing daughters' sexual risk reduction behaviors. Moreover, the question was asked in an attempt to understand the impact of mother-daughter communication about sexual health on daughters' sexual risk reduction behaviors. When sharing about a time they did something to protect their sexual health, daughters' spoke of a variety of methods, and the most prevalent methods were abstinence and education.

Most daughters mentioned abstinence as their primary method. Daughters also mentioned that their mothers, along with their culture and religion, influenced their decision to abstain. As mentioned throughout this chapter, it is clear that abstinence is the primary message related to sexual health that daughters receive, which may constrain knowledge of other effective sexual risk reduction methods and behaviors. While other studies have assessed whether or not young Kenyans engage in various risk reduction methods, to the author's knowledge, this is the first study to qualitatively assess young Kenyan women's sexual risk reduction behaviors. In doing so a holistic portrait has emerged related to the impact of messages about sexual health on daughters that stem from mothers, along with culture and religion.

In addition to abstinence, daughters also spoke of self and peer education, indicating that young Kenyan women tend to be both interested in learning more about sexual health and also tend to enjoy peer education. While education is not typically viewed as a risk reduction method, this study indicated that mothers encouraged

daughters to pursue education as a method of maintaining abstinence. Furthermore, the finding that daughters enjoy peer education indicates that peer-based HIV prevention interventions may be successful in Kenya and offer an opportunity to educate more young women on sexuality-related issues. To the author's knowledge, no Kenya-based studies have indicated this finding.

Parent-Based Expansion of the Theory of Planned Behavior

Findings from this study highlight the utility of the PETPB framework in investigating factors that influence young Kenyan women's sexual risk. As mentioned, the PETBP framework guided development of interview questions. Results shed light on the manner in which mothers and other external factors influence young women's sexual risk reduction behaviors in rural Kenya.

This study indicated that mothers were affected by cultural and religious influences that seemed to constrain comprehensive knowledge of sexuality and shape mothers' behavioral beliefs (i.e., beliefs that a behavior is associated with specific outcomes) and normative beliefs (i.e., the belief that proximal individuals approve or disapprove of a behavior). As mentioned, both culture and religion were said to encourage abstinence and consequently mothers seemed to believe that abstinence was the only appropriate risk reduction method for daughters. This belief also likely shaped mothers' intentions to influence their daughters' sexual behavior by encouraging abstinence. Mothers' intentions seemed to have an influence on daughters' beliefs, intentions, and behaviors.

With regard to normative beliefs, daughters' identified their mothers as key normative referents and their behavioral beliefs seemed consistent with their mothers—in

that they tended to believe that abstinence was the only effective method of preventing HIV and other STIs. Mothers seemed to impact daughters' normative beliefs, as daughters indicated that they valued their mothers' advice on sexuality and it was clear that mothers encouraged abstinence and discouraged premarital sexual activity. These beliefs, in turn, seemed to be directly related to daughters' intentions to practice abstinence and daughters' identification of abstinence as their primary sexual risk reduction behavior.

Implications for Practice and Theory

Gender-specific prevention interventions involving women of all ages are critical, particularly given findings that women tend to be disproportionately impacted by HIV/AIDS. In sub-Saharan African, women account for approximately 60% of HIV infections (UNAIDS, 2009). Despite that HIV is increasingly impacting women, gender-specific HIV prevention interventions are sparse. Findings from this study offer a variety of important implications for practice and theory.

With regard to practice findings elucidate the necessity of group-level and dyadic HIV/STI prevention interventions among young women in rural Kenya. Findings also have implications related to cultural and institutional factors that can influence second order change in light of the HIV epidemic. With regard to theory, this study highlights the important role of Community Psychology tenants play in addressing health issues outside the US. In addition, this study also underscores the utility of the PETPB framework in understanding mother-daughter communication about sexual health in rural Kenya.

Prevention Interventions

By investigating mother-daughter knowledge and communication, along with daughters' risk reduction methods, a comprehensive portrait regarding a range of proximal and distal influences on young women's sexual risk reduction behaviors have emerged. This study indicates that mothers are a primary influence on young Kenyan women's beliefs about sexuality and sexual risk reduction. Therefore, it is important to include mothers in Kenyan HIV and other STI prevention interventions. In addition, results of this study also indicate that peer-based interventions and cultural/ religious campaigns may have a strong impact on young Kenyan women's sexual risk behaviors. Each of these intervention approaches will be discussed in the following paragraphs.

US studies have indicated that mothers can have a positive influence on young women's sexual risk reduction behaviors (Hutchinson et al., 2003). Kenyan studies have also indicated that parental involvement in youth-based interventions has a positive impact on sexual health knowledge and behaviors (Alford, Cheetham, & Hauser, 2005; Poulsen et al., 2010a). Moreover, research has also demonstrated that programs are needed to increase Kenyan parents' knowledge and understanding of sexual health communication in order to increase parent-child communication about sexual issues (Poulsen et al., 2010b). Findings from this study highlight the role of Kenyan mothers, specifically, in HIV prevention among young women. Moreover, the present study indicates that it is necessary to provide mothers with more comprehensive sexuality information and a variety of risk-reduction methods. Mothers indicated low levels of sexual health knowledge that seemed to impair communication with their daughters. This phenomenon may have, in turn, reduced daughters' sexual health knowledge and

constrained their sexual risk reduction behaviors. Therefore, HIV prevention interventions for young women and their mothers must move away from solely focusing on abstinence to more comprehensive sexuality education and behavioral training.

As previously mentioned, the Families Matter! Program (FMP) is a sexual risk reduction intervention designed to improved Kenyan parents' knowledge, skills, comfort, and confidence in communicating with their children prior to the onset of sexual risk behaviors and to increase parent-child communication (Vandenhoudt et al., 2010). The FMP offers parents of youth aged 9 to 12 years a series of five workshops and during the fifth session, children are invited to participate in a guided communication exercise. Findings from the present study highlight the utility of this approach in providing sexual health information, working on communication skills, and offering opportunity for parents and children to practice communicating during the intervention.

The present study also indicates that comprehensive sexuality education should be emphasized and religious and cultural beliefs related to abstinence must be addressed. Moreover, this study indicates that gender-specific interventions may offer even greater effect as young women have a greater level of risk (MOH, 2009) and that mothers, specifically, have a strong influence on their risk reduction decisions. A Kenyan mother-daughter sexual risk reduction intervention should work with mothers and daughters to educate them on communication skills, provide comprehensive sexuality information (including various risk-reduction strategies), offer opportunity for behavioral skills training so that participants can practice risk-reduction methods (e.g., using condoms), and dispel myths and confusion about sexual health issues so that misinformation is not perpetuated.

This study also found peer education to be important to young Kenyan women, indicating a high level of acceptability for peer-lead interventions. When developing peer-lead HIV interventions, it is important to note the high level of peer pressure to engage in sexual activity and difficulty negotiating sexual situations noted within this study and in several Kenya-based studies (Nzioka, 2001; Maticka-Tyndale et al., 2005). Thus, peer-lead interventions should utilize an empowerment approach. Empowerment is defined as a “mechanism by which people, organizations, and communities gain mastery over their affairs” (Rappaport, 1987, p. 122). Peer-based interventions could work to empower young women to use strategies to avoid or decrease peer-pressure to engage in sex and to negotiate sexual situations.

One Kenya-based program uses a peer-based approach to address these issues. The Binti Pamoja Centre in Kibera, Kenya aims to create a safe space for girls and young women in Kenya to discuss reproductive health issues and to address problems such as gender discrimination, domestic abuse, and rape through youth forums, drama, a newsletter and peer trainings (Binti Pamoja, n.d.). During the peer education trainings, young women are educated on sexual health issues along with other relevant to young women’s sexual risk. Peer educators then work in the community to provide other young women with sexual risk reduction information. Findings from this study indicate the value of programs that involve providing young women sexual risk reduction education, communication skills, and that address gender-specific issues that contribute to young Kenyan women’s sexual risk.

Finally, because of ecological nature of this study, mesosystem and exosystem level factors emerged. Specifically, both mothers and daughters noted the role of their

culture and religion on their communication, knowledge, and sexual risk reduction behaviors. Moreover, both were said to offer mechanisms to disseminate sexual health messages and both primarily focused on abstinence among young women. This finding emphasizes the role that society-level and church-based campaigns and interventions can have on influencing young Kenyan women's sexual risk reduction behaviors. It is also important that both move from focusing on abstinence only and toward more comprehensive messages about sexuality.

Cultural Factors

In addition to implications for prevention interventions this study also highlighted the need to address various community-level cultural factors. Community-level cultural factors were not found to have a direct impact on participants' beliefs or behaviors, but were said to put Kenyan women, in general, at greater risk for sexual health problems. These factors included rape and cultural practices such as female circumcision and polygamy.

As mentioned, rape was a salient catalyst for many mother-daughter conversations. Moreover, there are indications that Kenyan women have little control in sexual situations and difficulty in addressing rape within their communities (Maticka-Tyndale et al., 2005; Nzioka, 2001; Toroitich-Ruto, 1997; UNAIDS, 2006). These findings indicate that more work needs to be done to address rape in rural Kenya, including working with communities to develop strategies to reduce the incidence of rape and increase reporting.

Unfortunately, it appears that rape-prevention efforts and post-rape services are limited throughout Kenya (UNAIDS, 2006; Kilonzo et al., 2009). In response, the

UNAIDS 2006 report on sexual violence against girls and women in Kenya offered several key areas that need to be addressed to reduce rape and other sexual violence. Key elements included engaging policy makers and the government to develop a national framework to address rape at both national and community levels, educating and involving men in rape and sexual violence-reduction programs, strengthening coalitions that aim to reduce sexual violence, enforcing and revising legislation on sexual offenses, and developing a national approach and standards to integrate the response to sexual violence in health services.

With regard to cultural practices, it is important to note that many participants talked of female circumcision and polygamy. Neither of these cultural practices was said to impact daughters' sexual risk reduction behaviors, but discrepancies among mothers and daughters perspectives are important to note. With regard to female circumcision, daughters focused on how the banning of female circumcision decreased HIV transmission, whereas mothers felt that female circumcision was beneficial in decreasing women's sexual desires and thereby their sexual risk. With regard to polygamy, daughters noted that the discouragement of polygamy was beneficial because of reductions in partners, and therefore decreases in the risk of HIV/STI transmission. Mothers tended to feel that men still engaged in polygamy (by having sex with multiple partners while in committed relationships) and that the stigmatization of polygamy made it more difficult to discuss sexual risk due to multiple partners among men. National studies indicate that both female circumcision and polygamy are prevalent in Kenya despite that female circumcision was outlawed in 2001 and that polygamy is strongly discouraged (Center for Adolescent Health and Development, 2004; MOH, 2009).

Therefore it is important to facilitate greater dialogue and education on the risks of both practices as they pose high risk for HIV transmission.

Institutional Factors

With regard to institutional factors, there has been a call to integrate HIV services into broader reproductive health services. As previously mentioned, according to the World Health Organization (2005), reproductive health is best described as “a state of physical, mental, and social well-being in all matters relating to the reproductive system at all stages of life.” International studies have indicated that HIV is primarily an STI and that contracting an STI generally increases the risk of acquiring HIV (Centers for Disease Control, 2005; Coggins & Senegal, 1998). Therefore HIV issues should be integrated into the broader field of reproductive health at an institutional level (Askew & Bereb, 2003; Coggins & Senegal, 1998). Moreover, within Kenya there is also evidence that the prioritization of HIV programs has come at the expense of reproductive health programs and that there is little integration among HIV and reproductive health institutions (Aloo-Obunga, 2003). The present study indicates that sexuality, sexual health, and HIV/AIDS are all interconnected and therefore it is important to address each factor simultaneously.

Community Psychology

Findings from this study have strong implications for the role of Community Psychologists in helping to address health issues, including the HIV/AIDS epidemic, outside the US. Tenants of Community Psychology were incorporated into the present research study. Specific tenants included prevention, diversity, an ecological perspective, and social justice.

Prevention is a principal tenant of Community Psychology and it can be thought of at different levels (Dalton, Elias, & Wandersman, 2001). Primary prevention is focused on reaching a population before they are exposed to condition. Secondary prevention targets individuals that are showing early signs of being impacted or exposed to a condition. Tertiary prevention is given to individuals that have been impacted or exposed to a condition. Given the high rate of HIV and other STIs among young Kenyan women, the present study focused identifying factors that are relevant to primary and secondary HIV/STI prevention among young Kenyan women. Findings of this study indicate that primary and secondary prevention are feasible if mothers have the motivation and skills to have meaningful conversations about sexual health with daughters before they engage in behavior that increases their sexual risk.

Community Psychology also places a high value on understanding human diversity (Dalton, Elias, & Wandersman, 2001). Trickett (1996) emphasized that diversity must be contextualized to allow for emic (i.e., culturally-specific) investigations. The present study used qualitative methods to explore the diversity of Kenyan mothers' and daughters' experiences, within the various ecological contexts the participants lived in. In doing so a diverse array of perspectives and experiences emerged.

The ecological perspective is also of interest to Community Psychologists, as it can identify variables that contribute to second order change (Dalton, Elias, & Wandersman, 2001). Second order change refers to alterations that can have a long term impact by addressing social systems and structures, rather than individuals. The ecological perspective that stemmed from use of the PETPB framework uncovered

various cultural, religious, institutional, and political influences on mother-daughter communication about sexual health and sexual risk reduction strategies. These factors should be addressed to initiate second order change that can result in a healthier sexual climate for young women in Kenya.

Finally, Community Psychology emphasizes social justice and the results of this study have strong social justice implications. Social justice is a canonical concept engrained in the field since its inception. Moreover, utilizing social justice concepts across multiple levels of analysis has been advised to address social justice issues (Fondarcaro & Weinber, 2002). HIV/AIDS is a social justice issue. As mentioned, the HIV/AIDS epidemic is a health and human rights issue—inflicting and killing millions of people annually (Halperin et al., 2004). Moreover, young women in Kenya are extremely vulnerable to HIV. Findings from this study offer insight into various factors that can be addressed to reduce young rural Kenyan women's sexual risk.

The Parent-Based Expansion of the Theory of Planned Behavior.

Overall, the PETPB proved a useful model in understanding mother-daughter communication. The ecological aspects of the model allowed for a more comprehensive framework to investigate mother-daughter communication about sexual health. That said, the primary focus of the model is on the individual, rather than broader cultural factors. Given findings related to the importance of culture and religion in understanding knowledge and communication related to sexual health, the heavy influence on the individual is a limitation of the model. Findings from the present study indicate that cultural and religious factors had a strong influence on both mothers and daughters in rural Kenya.

Strengths and Limitations

There are notable strengths and limitations of the present study. Strengths included the qualitative nature of the study, along with the utilization of the PETPB and narrative frameworks, and collaboration with local stakeholders. Limitations were related to the background of the principal investigator and recruitment methods.

The qualitative nature of this study allowed for a contextualization of prior research findings on young Kenyan women's experiences and mother-daughter communication. Specifically, by giving voice to participants and allowing them to share their experiences and perspectives, a better understanding of the manner in which mothers influence their daughters' beliefs, intentions, and sexual risk reduction behaviors surfaced. Nuanced results related to the relationship of mothers' and daughters' knowledge and communication, along with external factors, allowed for a holistic understating of mothers' roles in young Kenyan women's HIV prevention to emerge.

The PETPB model incorporates Bronfenbrenner's Ecological Systems Theory of Human Development (Bronfenbrenner, 1977; Bronfenbrenner, 1988) and allowed for an ecological perspective to emerge. At the microsystem level, it was evident that young women were speaking to a variety of individuals. In particular, this study highlights the role and impact of mothers. At mesosystem and exosystem levels, it is clear that conversations were taking place outside the home, including at schools and churches. At the macrosystem level, it is clear that cultural and religious values influenced daughters' knowledge and behaviors, particularly regarding abstinence. Finally, at the level of the chronosystem, mothers focused on cultural shifts that had an impact on how preventive messages have been endorsed and adopted over time.

The narrative approach incorporated in this study allowed for more complete and culturally-grounded findings to surface. In telling stories of mother-daughter communication about sexuality and sexual risk reduction methods, broader perspectives surfaced. Narrative analysis captured the nuance of individual experiences, yet because of this variability findings related to the stories offered a more extensive understanding of mother and daughter communication about sexuality and young Kenyan women's sexual risk reduction strategies.

Further, this study used existing resources to gain entrée into the Thigio community. Foremost, this project utilized an ongoing relationship between DePaul University and the Daughters of Charity (DOC) to implement the study, collect data, and return preliminary results back to the participants. Without this relationship, or the assistance from the DOC, it is unlikely that participants would have felt comfortable participating in the research study.

One limitation of the study was the background and perspectives of the principal investigator. The principal investigator's background, being a young Caucasian woman, highly educated, and from the US, was very different from that of the research participants in the study. Her experiences may have had an impact on recruitment, responses, analysis, and interpretations of the study. Because of this limitation, steps were taken to minimize researcher biases, including bracketing and member checking.

The participant criteria may have also posed a limitation, as it required that participants were fluent in spoken English. This may have impacted the results of the study, as women that were not fluent in English were unable to share their experiences

and perspectives. Although English is a national language in Kenya, it is possible that some residents of the Thigio area may not have participated due to language barriers.

The final limitation of this study is due to recruitment strategies. Participants were recruited with assistance from the DOC in Thigio. The DOC have provided services to the Thigio community since 2004. Even so, the religious nature of their work may have limited participation among individuals who did not identify as Catholic.

Directions for Future Research

Findings from this study suggest that rural Kenyan mothers have an impact on their daughters' sexual health attitudes, intentions, and sexual risk reduction behaviors. Even so, a variety of areas still need to be investigated to fully understand factors that relate to young Kenyan women's sexual risk reduction behaviors and that can reduce their risk of HIV and other STIs. There are a several areas that the present study has indicated warrant further exploration.

As mentioned, a limitation of this study was that it focused on a very specific community. Moreover, there are no other studies utilizing the PETBP framework in Kenya. Thus future research should employ the PETPB to guide research in other rural areas in Kenya. In doing so, future research studies can ascertain whether these findings are similar in different regions and among different tribes in Kenya.

It would be also useful to understand the utility of the PETPB model in urban settings. As noted, there are many distinctions related to sexual health knowledge, attitudes, and behaviors among urban and rural Kenyan women. For instance, young urban women have a higher incidence of HIV, yet higher levels of sexual health knowledge and greater access to information (CBS, MOH, & ORC Marco, 2004;

Schuller et al., 2006; Voeton et al., 2004). Therefore, it is likely that participants in the present study would have sizeable differences compared to those in urban areas.

In addition, a key potential normative referent was never mentioned during the course of the present study. Specifically, daughters never mentioned discussing sexuality with their fathers. Other Kenyan studies have found that young women are less likely to discuss sexual matters with their fathers (Juma, Mwaniki, & Maturi, 2005; Kigaru et al., 1996). Therefore, it would be useful to investigate the barriers to communication among young Kenyan women and their fathers. Kigaru et al. (1996) also notes that young men prefer to discuss sexual experiences with their fathers. Therefore, it might be useful to employ the PETPB framework to understand how father-son communication about sexuality impacts Kenyan young men's sexual risk reduction behaviors.

Last, this study also indicated that more exploratory work needs to be done related to the incidence of rape in Kenya. As mentioned, national studies have captured the high rates of rape in Kenya and allude to the barriers that women face in reporting rape (UNAIDS, 2006). Moreover, the UNAIDS 2006 report on sexual violence in Kenya made the call to investigate young girls and women's experiences of sexual violence. To the author's knowledge no studies have qualitatively explored rape in Kenya.

Afterward

There were many important occurrences related to the present study that were not captured in the prior sections. These experiences reflect the impact of the research on the Thigio community and further illuminate the community's commitment to addressing sexual health issues, including HIV/AIDS. The following paragraphs highlight the perspectives of the principal investigator of the present study.

While developing the research proposal I simultaneously developed an intervention aimed at increasing mother and daughter knowledge and communication about sexual health. The intervention was called “Mwanangu, Binti Yangu Mpendwa! Tuzungumze!” (Mothers and Daughters Communicating about Sexual Health), and consisted of a five hour workshop. The workshop is a modified version of a US intervention (“Mothers and Daughters Talking and Communicating Together”) that was culturally adapted for rural-Kenyan mothers and daughters. The workshop included two hours focused on mother-daughter communication, a forty-five minute break, two hours focused on sexual health, and a fifteen minute conclusion.

The workshop was guided by two theories, Bronfenbrenner’s Ecological Systems Theory of Human Development (Bronfenbrenner, 1977) and Structural Ecosystems Therapy (SET, Mitrani, Szapocznik, & Robinson-Batista, 2000). The aim of SET is to impact family functioning within the family system, as well as the individual who is a part of the family (e.g., daughter). Cultural adaptations were also made to the initial intervention based on the work of Rosello and Bernal (1996), who noted eleven important considerations when making cultural adaptations. These components included: language, persons, metaphors, content, concepts, goals, methods, context, development issues, technical issues, and theoretical issues. Each of these issues was addressed by the facilitator in collaboration with experts and stakeholders including Dr. Gary Harper, Philister Sidigu, Fr. Elias Kinoti, and the Thigio Daughters of Charity.

The workshop was conducted the day after all of the mother and daughter interviews concluded. All participants in the research study were invited to take part in the workshop and were encouraged to invite other mothers and daughters that fit the

criteria of the research study. Approximately fifty mothers and daughters participated in the workshop. After the workshop, many participants expressed their appreciation for the opportunity to facilitate increased communication about sexual health. Furthermore, after the workshop was completed, a local nurse informed me that several young women got tested together for HIV, as it was encouraged during the workshop.

In addition, the research and workshop seemed to spur further community level interest in addressing knowledge and communication about sexual health. Shortly after the workshop was completed, Dr. Gary Harper was asked why young men were not included. This led Dr. Harper to develop an intervention (“AMKA: Awakening Men for Knowledge and Action”) and conduct sexual health workshops with young men in the community.

Last, as mentioned, preliminary results from the study were presented to participants in June 2010 by the principal investigator. The principal investigator worked with the Daughters of Charity to organize and promote the event. Eleven mothers and one daughter attended the event. It was said that more daughters would have attended the event, but most were attending boarding school. The event lasted about an hour and a half. Fact sheets in English and Kikuyu with information about the preliminary results were distributed. The attendees seemed very interested in the results. They asked many questions and tended to concur with the impressions that mothers needed to increase their sexual health knowledge and communication. In addition, the attendees focused heavily on the results related to rape. The principal investigator was asked to give advice on ways in which the women could begin to address rape in their community. The principal

investigator encouraged the attendees to hold a community forum on rape and discussed arrangements with the Daughters of Charity who were enthusiastic about the forum.

Taken together, these experiences further highlight the need for additional interventions and indicate the community support for addressing sexual health issues and disparities. It is clear that community members are interested in improving knowledge and communication and addressing other sexual health issues.

CHAPTER V

SUMMARY

According to the Joint United Nations Programme on HIV/AIDS (2009) the number of people living with HIV/AIDS has risen drastically from about 8 million in 1990 to over 33 million in 2009. The area hardest hit has been sub-Saharan Africa, accounting for over two-thirds of all cases of HIV/AIDS, and 70% of all adult and child deaths due to AIDS (UNAIDS, 2009). Within sub-Saharan Africa, Kenya is a country that has a particularly high prevalence of HIV/AIDS. Currently, there are nearly 1.5 million people aged 15 to 64 years are living with HIV/AIDS in Kenya (Ministry of Health, 2009).

Given the prevalence of HIV/AIDS in Kenya, there have been a number of prevention and intervention efforts developed both nationally and internationally. Many programs in Kenya target youth because about half of the population in Kenya is under the age of 18 and about 4% of Kenyan youth aged 15 to 24 years live with HIV/AIDS (Ministry of Health, 2009). Despite a number of prevention programs targeting Kenyan youth, recently it has been recognized that an important component has been ignored, namely parents.

Empirical studies in the United States (US) demonstrate that parents play a key role in preventing HIV/AIDS in youth (Carabassi, Greene, & Bernt, 1992; Miller, Levin, Whitaker, & Xu, 1998; Dittus, Jaccard, & Gordon, 1999; Dutra, Miller, & Forehand, 1999; Kotchick, Dorsey, Miller, & Forehand, 1999; Karofsky, Zeng, & Kosorok, 2000). Recently, institutions such as the Kenya Ministry of Health (MOH) have made a call to include parents in Kenyan programs (MOH, 2005a). However, empirical studies have

also demonstrated that significant barriers exist in communication between Kenyan parents and children on matters regarding reproductive health, particularly among older adolescents (Obare, Agwanda, & Magadi, 2005).

Research has also demonstrated that Kenyan young women are particularly vulnerable to HIV. Young women aged 15 to 24 years suffer a prevalence of HIV/AIDS nearly four times greater than that of young men in the same age group (MOH, 2009). In addition, they also face a high rate of other STIs (CBS, MOH, & ORC Marco, 2004; MOH, 2009). Furthermore, rural Kenyan women tend to have lower levels of knowledge related to HIV and other STIs and higher engagement in high-risk sexual activities (CBS, MOH, & ORC Marco, 2004; Voeton, Egesah, Habbema, & Dik, 2004). Thus, there is a distinct need to learn more about factors that are barriers and facilitators to HIV and other STI prevention among young women in Kenya.

The present study focused on young women, and the manner in which communication with their mothers may facilitate decreased sexual risk behaviors in rural Kenya. With regard to sexual behaviors, Hutchinson and Wood (2007) developed the parent-based expansion of the theory of planned behavior (PETPB). The PETPB is a theoretical framework that builds upon the theory of planned behavior, to include the influence of parents in understanding adolescent sexual risk behavior. The present study was guided by the PETPB and explored communication, knowledge of sexuality and sexual health, and preventive behaviors among rural secondary school aged Kenyan young women (15 to 19 years) and their mothers.

Thirty-eight mothers and daughters participated in hour long individual interviews in Thigio, Limuru, Kenya. All interviews were transcribed verbatim and systematically

coded using narrative and phenomenological frameworks (Patton, 2002; Riessman, 1993). Main themes among daughters and mothers were separately explored using cross-case analyses and then comparative analysis was used to compare main themes among mothers and daughters simultaneously (Miles & Huberman, 1994).

Results indicated that mothers had an impact on their daughters' beliefs and intentions, ultimately influencing their sexual risk reduction behaviors. Results also indicated that other external factors (namely culture and religion) shaped both mothers and daughters beliefs and intentions. Overall, this further highlights the role that mothers can play in sexual risk reduction among their daughters.

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Help Us Improve HIV & Other STI Prevention Efforts for Young Women

What is the goal of this study?

The Daughters of Charity are working with DePaul University to gather information that can improve programs that aim to lower the rates of HIV, AIDS, and other sexually transmitted infections among young women in Kenya. We would like your help. We are looking for mothers and their daughters aged 15 to 19 years to participate in interviews.

How can I learn more about the interviews?

Mothers of young women aged 15 to 19 years are invited to learn about the interview times and locations.

Please visit at 2:00 pm on Tuesday November 27th in the C.O.C. Hall.

We will be providing refreshments, information about the study, and signing people up for interviews.

Who can participate in an interview?

Young women aged 15-19 years and their mothers.

How long will the interviews take?

A mother will be interviewed first for about one hour. Next her daughter will be interviewed for about one hour. This means that a mother and her daughter will be at the study for a total of two hours. As a way of thanking you for taking the time to participate in the interviews, you will be given a small food bag.

Hope to see you there!

Appendix B
Recruitment Script at Informational Session

Mother-Daughter Communication about Sexual Health in Rural Kenya, East Africa

What is the goal of this study?

The Daughters of Charity are working with DePaul University to gather information that can improve programs that aim to lower the rates of HIV, AIDS, and other sexually transmitted infections among young women in Kenya. We would like your help. We are looking for mothers and their daughters aged 15 to 19 years to participate in interviews.

Where are these interviews being held?

Interviews will be held at the the Holy Cross Dispensary. We can sign you up today for specific interview times.

Who can participate in an interview?

Young women aged 15-19 years and their mothers. Importantly, a mother and daughter must come to the interview together.

How long will the interviews take?

A mother will be interviewed first for about one hour. Next her daughter will be interviewed for about one hour. This means that a mother and her daughter will be at the study for a total of two hours. As a way of thanking you for taking the time to participate in the interviews, you will be given a small food bag.

Any Questions?

NOTE: If participant is interested in participating please use the guidelines on the sign up template to help them select a timeslot for the study.

Appendix C
Timeslot Sign Up Sheet Script & Sign Up Sheet

SCRIPT: Thank you for your interest in participating in an interview. Before I sign you up for a timeslot, there are a couple of things I need to ask you:

Do you have a daughter aged 15 to 19 years that speaks English and can also participate in the study at the same time as you?

If she answers “no,” then inform her that she does not fit the criteria to participate in the study and thank her for her interest.

*If she answers “yes” then proceed to the next question in **bold**.*

Thank you. We will be holding interviews for two hours at a time on November 26th, 28th, 29th, 30th, and December 1st, 2nd, 3rd, and 4th.

Are there any times during those days that both you and your daughter can attend an interview session?

If she answers “no,” then inform her that there are no other dates available and thank her for her interest.

If she answers “yes” then proceed to the timeslot sheet and sign her up for an interview time. Pick only one timeslot and check the “Yes” box, to indicate that someone has selected that timeslot. Do not allow other people to sign up for that timeslot.

*Next, proceed to the next question in **bold***

Before we go, I need one last bit of information, just to get a sense of who will be attending. Would you mind telling me your daughter’s specific age?

Please indicate the daughter’s age in the appropriate box next to the timeslot.

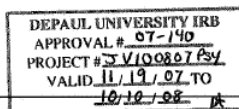
If the daughter is not aged 15 to 19 please inform her that she does not fit the criteria to participate in the study and thank her for her interest.

[NOTE: timeslot sign up sheet is on the following page]

TIMESLOTS:November 26th:Timeslot 1: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.November 27th:Timeslot 2: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 3: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.November 28th:Timeslot 1: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 2: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 3: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.November 29th:Timeslot 1: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 2: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 3: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.November 30th:Timeslot 1: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 2: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 3: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.December 1st:Timeslot 1: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 2: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 3: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.December 2nd:Timeslot 1: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 2: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 3: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.December 3rd:Timeslot 1: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 2: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 3: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.December 4th:Timeslot 1: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 2: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 3: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.Timeslot 4: [enter exact time]. Timeslot Confirmed: ☐ Yes Daughters age _____.

Appendix D

Mother Consent to Participate in Research



Institutional Review Board
1 East Jackson Boulevard
Chicago, Illinois 60604-2287
312/362-7593
FAX: 312/362-7574

MOTHER CONSENT TO PARTICIPATE IN RESEARCH

Mother-Daughter Communication about Sexual Health in Rural Kenya, East Africa

What is the goal of this study?

The goal of this study is to better understand how mothers and daughters talk about sexual health. We are asking you to be in this study because you have a daughter aged 15 to 19 years. This study is being run by Jessica Velcoff. She has a Master's degree from DePaul University where she also works.

How much time will this take?

Your interview will take about one hour. Your daughter's interview will be right after yours and will also take about one hour. This means that you and your daughter will be at the study for a total of two hours.

What will my daughter and I be asked to do?

If you agree to be in this study, both you and your daughter will be interviewed. You will be asked what it is like talking with your daughter about sexual health. You will also be asked what you know about sexual health.

Your daughter will be asked the same questions as you. She will be asked about talking about sexual health and what she knows about sexual health. She will also be asked about what she does to keep from becoming infected with HIV, AIDS, or other sexually transmitted infections.

What are the risks if I say "yes" to this study?

Because you may not talk often about sexual health, you or your daughter may feel uncomfortable or embarrassed answering some questions. Importantly, **you and your daughter do not have to answer any question that you do not want to answer.** You can tell Ms. Velcoff that you do not want to answer it. You can also stop or quit the interview at any time, without any problems.

There is also a small risk that someone else might find out what you have said or what your daughter has said during the interview. To make this less of a risk, you will not be asked to provide your full name or the full names of other people during the interview.

What are the benefits of this study?

We hope that what we learn will help to improve programs that aim to lower the rates of HIV, AIDS, and other sexually transmitted infections among young women in Kenya.

Will we be compensated for being in the study?

As a way of thanking you for your time, you and your daughter will be given a small food bag. You will receive the food bag even if you do not sign this form, answer all of the questions, or choose to quit the interview.

Can I decide not to be in the study?

Yes, you can choose not to be in the study and not to allow your daughter to be in the study. Even if you agree to be in the study, your daughter is allowed to say that she does not wish to be in the study.

One important thing is that both mother and daughter must do the same thing. For this reason, if you say that you do not want to be in the study, we will not interview you or your daughter. Similarly, if your daughter says she does not want to be in the study, neither of you will be interviewed.

It is not a problem if you or your daughter says "no" to the study. Even if you say "yes" to the study now, you can change your mind later and leave the study.

How will our privacy be protected?

You and your daughter will not be asked to give your names or the names of other people during the interview. This will make it less likely that anyone will find out what you said or what your daughter said.

In addition, the records of this study will be kept private. Reports of this study will not include any information that will identify you or your daughter. Our records will also be stored securely and only researchers will have access to the records.

What if I have questions later?

If you have questions about this study, please contact Jessica Velcoff at 000-1-773-325-4084 or by e-mail at jvelcoff@depaul.edu. If you have questions about your rights as a participant in the study, you may contact Shay-Ann Heiser Singh, DePaul University's Director of Research Protections at 000-1-312-362-7593 or by email at sheiser@depaul.edu.

You will be given a copy of this information to keep with you.

Statement of Consent:

I have read the above information about my participation. I have all my questions answered.

- ☐ I would like to participate in this study. ☐ I **DO NOT** want to participate in this study.
☐ I permit my child to be in this study. ☐ I **DO NOT** permit my child to be in this study.

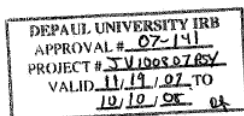
Daughter's Name: _____

Age: _____

Parent/Guardian Signature: _____ Date: _____

Appendix E

Daughter Assent to Participate in Research



DEPAUL UNIVERSITY



Institutional Review Board
1 East Jackson Boulevard
Chicago, Illinois 60604-2287
312/362-7593
FAX: 312/362-7574

DAUGHTER ASSENT TO PARTICIPATE IN RESEARCH STUDY

MOTHER-DAUGHTER COMMUNICATION ABOUT SEXUAL HEALTH IN RURAL KENYA, EAST AFRICA

What is the goal of this study?

The goal of this study is to better understand how mothers and daughters talk about sexual health. We are asking you to be in this study because you are a young woman aged 15 to 19 years and because you have a mother that has agreed to be in this study. This study is being run by Jessica Velcoff. She has a Master's degree from DePaul University where she also works.

How much time will this take?

Your interview will take about one hour. Your interview will be after your mother's interview. Your mother's interview will also take about one hour. This means that you and your mother will be at the study for a total of two hours.

What will I be asked to do?

If you agree to be in this study, you will be asked what it is like talking with your mother about sexual health. You will also be asked what you know about sexual health and what you do to keep from becoming infected with HIV, AIDS, or other sexually transmitted infections.

What are the risks if I say "yes" to this study?

Because you may not talk often about sexual health, you may feel uncomfortable or embarrassed answering some questions. Importantly, **if you do not want to answer any questions, you do not have to**. You can tell Ms. Velcoff that you do not want to answer a question. You can also stop or quit the interview at any time, without any problems.

There is also a small risk that someone else might find out what you have said. To make this less of a risk, you will not be asked to provide your full name or the full names of other people during the interview.

What are the benefits of this study?

We hope that what we learn will help to improve programs that aim to lower the rates of HIV, AIDS, and other sexually transmitted infections among young women in Kenya.

Will I be compensated for being in the study?

As a way of thanking you for your time, you and your mother will be given a small food bag. You will receive the food bag even if you do not sign this form, answer all of the questions, or choose to quit the interview.

Can I decide not to be in the study?

Yes, you can choose not to be in the study. Even if your mother has said that you can be in the study, you do not have to participate. Also, even if you say "yes" to the study now, you can change your mind later and leave the study.

How will my privacy be protected?

You will not be asked to give your name or the names of other people during the interview. This will make it less likely that anyone will find out what you said.

In addition, the records of this study will be kept private. Reports of this study will not include any information that will identify you. Our records will also be stored securely and only researchers will have access to the records.

What if I have questions later?

If you have questions about this study, please contact Jessica Velcoff at 000-1-773-325-4084 or by e-mail at jvelcoff@depaul.edu. If you have questions about your rights as a participant in the study, you may contact Shay-Ann Heiser Singh, DePaul University's Director of Research Protections at 000-1-312-362-7593 or by email at sheiser@depaul.edu.

You will be given a copy of this information to keep with you.

Statement of Assent:

I have read the above information. I have all my questions answered. I agree to be in this study.

Signature: _____ Date: _____ Age: _____

Mother's Name: _____

Appendix F

Mother Daughters Communication about sexual health: mother qualitative interview guide

INTRODUCTION GIVEN TO MOTHERS AND DAUGHTERS TOGETHER PRIOR TO COMMENCEMENT OF INDIVIDUAL INTERVIEWS:

Hello and thank you for coming. I would like to share with you why I am conducting these interviews with you today. In general, I am interested in learning more about your thoughts about how mothers and daughters communicate about sexual health issues such as HIV and other sexually transmitted infections. I will be asking you to reflect on your experiences around these issues and things that have made it easier or harder to talk about them. Findings from your interviews will be used to educate people making new programs, or improving existing programs aimed at fighting HIV, AIDS, and other sexually transmitted infections.

You will be interviewed separately. First, I would like to ask mothers to come into this room for an interview that will last about one hour. Once we are done, we will come out and it will be the daughters turn to be interviewed for about one hour. When you are not being interviewed please wait in this room and help yourself to refreshments and feel free to watch the video that I brought from the United States. In addition, at the end of the interview you will be given a small bag of food supplies, to show appreciation for your participation.

During the interview, everything you say will be completely private. I will make some notes as we talk, but I will not ask for your name or anything that will directly reveal your identity. I will also audio-record the interview to make sure I don't miss any important information that you have shared. When we have finished, the records of this study will be kept private. In any reports of this study, we will not include any information that will identify you. Our records will also be stored securely and only researchers will have access to the records.

As I have stated, some of the questions will ask about your personal experiences with communicating about sexual health issues with your mother or daughter, thus you may experience some degree of discomfort related to revealing your own views on these topics. Both of you have the right to choose not to participate. For example, a daughter can choose not to participate even if her mother already has. You may also choose not to answer any questions you wish or you may decide to leave the interview at any time without any negative consequences. Remember, taking part in this interview is entirely up to you and no one will be upset if you do not want to participate. If at any time you feel like leaving and not participating any more, that is fine too. In addition, if you use any formal names of people during the focus group (including your own), please use just the first name or you can even make up a false name too.

You will not personally benefit from being in this study. However, we hope that what we learn will help to make programs that aim to lower the rates of HIV, AIDS, and other sexually transmitted infections among young women in Kenya even better.

Do you have any questions about what I've just told you? If at any time during the intervention you have any questions or if something I ask or say is not clear, please let me know and I will clarify. Remember that you are free to refuse to answer any questions or to leave interview at any time.

Are you ready to get started?

WARM-UP/BUILDING RAPPORT

This section is designed to:

- ❖ Provide participants with an opportunity to become comfortable with talking with the interviewer
- ❖ Give participants an opportunity to ask additional questions about the study

- a. **Before we start talking in detail about talking with your daughter, I was wondering if you had any questions about the interview?**
- b. **I would first like to get to know you better by asking you to tell me about yourself.**
 - What do you do in a typical day?
 - What do you do for fun?
- c. **Tell me about your relationship with your daughter.**
 - What kinds of things do like to do together?
 - Do you cook together?
 - Do you go to church together?
 - What is something you really like about her?
- d. **Tell me about a time you and your daughter talked about something that was difficult.**

SECTION I: Mother-Daughter Communication

This section is designed to:

- ❖ Provide participants with an opportunity to become comfortable with talking about sex in general, before addressing the more specific issue of sexual health
- ❖ Get detailed descriptions of mothers' experiences communicating with their daughters about sexuality
- ❖ Understand barriers and facilitators of such communication
- ❖ Explore the mothers perceived role in sexual health-related prevention

1. **First I would like to talk with you about sexuality. To be clear, sexuality is a term that includes more than just the physical act of engaging in sex. It also includes attraction, desires, and relationships. Tell me a story about a time you talked with your daughter about sexuality.**

If a participant is not sure where to begin, ask her to tell about the last time she communicated with her daughter about sexuality.

Probes:

- a. Who started the conversation about sexuality?
- b. How was the conversation started?
- c. What was said in the conversation?
 - a. What did you say?
 - b. What did your daughter say?
- d. What made the conversation more difficult?
- e. What made the conversation easier?
- f. What does your tribe or culture say about sexuality?
- g. Did religious values have any influence on the conversation?
- h. How did the conversation end?

SECTION II: Sexual Health Knowledge

This section is designed to:

- ❖ Assess the mothers' knowledge related to sexual health
- ❖ Understand barriers and facilitators of sexual health knowledge

2. Now I would like to talk with you about sexual health. Sexual health is a medical term that addresses issues that are to sexual acts, and include sexually transmitted infections (STIs), such as HIV. What do you know about sexual health?

If a participant is not sure where to begin, ask her to share what she knows about sexually transmitted infections and about HIV/AIDS.

Probes:

- a. Where do you learn about sexual health?
- b. What types of information do you receive about sexual health?
- c. What does your tribe or culture say about sexual health?
 - a. Do those values have an influence on what you know about sexual health?
- d. Do religious values have any influence on what you know about sexual health?

SECTION III: Communication about Sexual Health

This section is designed to:

- ❖ Learn more about the mothers' role in communicating about sexual health
- ❖ Explore the relationship of sexual health knowledge and communication among mothers and daughters

3. Tell me a story about a time you talked with your daughter about sexual health.

If a participant is not sure where to begin, ask her to tell about the last time she communicated with her daughter about sexual health.

Probes:

- a. Who started the conversation about sexual health?
- b. How was the conversation started?
- c. What was said in the conversation?
 - a. What did you say?
 - b. What did your daughter say?
- d. What made the conversation more difficult?
- e. What made the conversation easier?
- f. Did your tribal or cultural values have any influence on the conversation?
- g. Did religious values have any influence on the conversation?
- h. How did the conversation end?

SECTION IV: Wrap-up

This section is designed to:

- ❖ Allow mothers to have an opportunity to share additional insights related to sexual health
- ❖ Allow mothers to ask additional question about the study

4. Is there anything else you would like to share or ask?

SECTION V: Debriefing

This section is designed to:

- ❖ Assess participants feelings after participating in the study
- ❖ Allow interviewer to offer referral if necessary for counseling services

5. Several questions in the interview asked you about personal and sensitive information. Some of the questions in the interview may have caused you to think about situations or feelings that we would like to check in with you about. I want to check in with you to make sure that when you leave here today you are feeling okay and that you are safe.

- a. If a participant expresses that she is interested in counseling services related to any aspect of the interview, refer the participant to the services offered at the Holy Cross Dispensary.
- b. If a participant indicates psychological distress and is in need of immediate service, contact Sr. Eileen, the on-staff psychiatric nurse, for assistance.

Appendix G

Mother Daughters Communication about sexual health: daughter qualitative interview guide

INTRODUCTION GIVEN TO MOTHERS AND DAUGHTERS PRIOR TO COMMENCEMENT OF INTERVIEW:

Hello and thank you for coming. I would like to share with you why I am conducting these interviews with you today. In general, I am interested in learning more about your thoughts about how mothers and daughters communicate about sexual health issues such as HIV and other sexually transmitted infections. I will be asking you to reflect on your experiences around these issues and things that have made it easier or harder to talk about them. Findings from your interviews will be used to educate people making new programs, or improving existing programs aimed at fighting HIV, AIDS, and other sexually transmitted infections.

You will be interviewed separately. First, I would like to ask mothers to come into this room for an interview that will last about one hour. Once we are done, we will come out and it will be the daughters turn to be interviewed for about one hour. When you are not being interviewed please wait in this room and help yourself to refreshments and a feel free to watch the video that I brought from the United States. In addition, at the end of the interview you will be given a small bag of food supplies, to show appreciation for your participation.

During the interview, everything you say will be completely private. I will make some notes as we talk, but I will not ask for your name or anything that will directly reveal your identity. I will also audio-record the interview to make sure I don't miss any important information that you have shared. When we have finished, the records of this study will be kept private. In any reports of this study, we will not include any information that will identify you. Our records will also be stored securely and only researchers will have access to the records.

As I have stated, some of the questions will ask about your personal experiences with communicating about sexual health issues with your mother or daughter, thus you may experience some degree of discomfort related to revealing your own views on these topics. Both of you have the right to choose not to participate. For example, a daughter can choose not to participate even if her mother already has. You may also choose not to answer any questions you wish or you may decide to leave the interview at any time without any negative consequences. Remember, taking part in this interview is entirely up to you and no one will be upset if you do not want to participate. If at any time you feel like leaving and not participating any more, that is fine too. In addition, if you use any formal names of people during the focus group (including your own), please use just the first name or you can even make up a false name too.

You will not personally benefit from being in this study. However, we hope that what we learn will help to make programs that aim to lower the rates of HIV, AIDS, and other sexually transmitted infections among young women in Kenya even better.

Do you have any questions about what I've just told you? If at any time during the intervention you have any questions or if something I ask or say is not clear, please let me know and I will clarify. Remember that you are free to refuse to answer any questions or to leave interview at any time.

Are you ready to get started?

WARM-UP/BUILDING RAPPORT

This section is designed to:

- ❖ Provide participants with an opportunity to become comfortable with talking with the interviewer
- ❖ Give participants an opportunity to ask additional questions about the study

a. Before we start talking in detail about communication with your mother, I was wondering if you had any questions about the interview?

b. I would first like to get to know you better by asking you to tell me about yourself.

- What do you do in a typical day?
- What do you do for fun?

c. Tell me about your relationship with your mother.

- What kinds of things do like to do together?
- Do you cook together?
- Do you go to church together?
- What is something you really like about her?

d. Tell me about a time you and your mother talked about something that was difficult.

SECTION I: Communication about Sexuality

This section is designed to:

- ❖ Provide participants with an opportunity to become comfortable with talking about sex in general, before addressing the more specific issue of sexual health

1. First I would like to talk with you about sexuality. To be clear, sexuality is a term that includes more than just the physical act of engaging in sex. It also includes attraction, desires, and relationships. Who do you talk with about sexuality?

SECTION II: Sexual Health Knowledge

This section is designed to:

- ❖ Assess the daughters' knowledge related to sexual health
- ❖ Understand barriers and facilitators of sexual health knowledge
- ❖ Explore the relationship of sexual health knowledge and communication among mothers and daughters

2. Now I would like to talk with you about sexual health. Sexual health is a medical term that addresses issues that are to sexual acts, and include sexually transmitted infections (STIs), such as HIV. What do you know about sexual health?

If a participant is not sure where to begin, ask her to share what she knows about sexually transmitted infections and about HIV/AIDS.

Probes:

- a. Where do you learn about sexual health?
- b. What types of information do you receive about sexual health?
 - a. What has your mother told you about sexual health?
- c. What does your tribe or culture say about sexual health?
 - a. Do those values have an influence on what you know about sexual health?
- d. Do religious values have any influence on what you know about sexual health?

3. Who do you talk with about sexual health?

SECTION III: Mother-Daughter Communication

This section is designed to:

- ❖ Get detailed descriptions of daughters' experiences communicating their mothers about sexual health
- ❖ Understand barriers and facilitators of such communication
- ❖ Explore the mothers perceived role in sexual health-related prevention

4. Tell me a story about a time you talked with your mother about sexual health.

If a participant is not sure where to begin, ask her to tell about the last time she communicated with her mother about sexual health.

If a participant does not have experience communicating about sexual health, ask her to tell a story about a time she talked with her mother about sexuality.

Probes:

- a. Who started the conversation about sexual health (or sexuality)?
- b. How was the conversation started?
- c. What was said in the conversation?
 - a. What did you say?
 - b. What did your mother say?
- d. What made the conversation more difficult?
- e. What made the conversation easier?
- f. Did tribal or cultural values have any influence on the conversation?
- g. Did religious values have any influence on the conversation?
- h. How did the conversation end?

SECTION V: Sexual Health-Related Preventive Behaviors

This section is designed to:

- ❖ Get detailed descriptions of a daughter's behaviors related to sexual health prevention
- ❖ Understand barriers and facilitators of such behaviors
- ❖ Explore the mothers perceived role in sexual health-related prevention

5. Tell me a story about a time you did something to prevent HIV/AIDS or other STIs.

If a participant is not sure where to begin, ask her to tell about the last time she engaged in a behavior to prevent HIV, AIDS, or other STIs.

Probes:

- a. Are you currently sexually active?
- b. Why did you choose to do something to prevent HIV/AIDS or other STIs?
- c. Did your knowledge related to sexual health have an impact on your prevention behaviors?
- d. Did conversations with your mother have an impact on your prevention behaviors?
- e. Do tribal or cultural values have an influence on your prevention behaviors?
- e. Do religious values have any influence on your prevention behaviors?
- f. What was the result of your effort to prevent HIV/AIDS or other STIs?

SECTION VI: Wrap-up

This section is designed to:

- ❖ Allow daughters to have an opportunity to share additional insights related to sexual health
- ❖ Allow daughters to ask additional question about the study

6. Is there anything else you would like to share or ask?

SECTION V: Debriefing

This section is designed to:

- ❖ Assess participants feelings after participating in the study
- ❖ Allow interviewer to offer referral if necessary for counseling services

7. Several questions in the interview asked you about personal and sensitive information. Some of the questions in the interview may have caused you to think

about situations or feelings that we would like to check in with you about. I want to check in with you to make sure that when you leave here today you are feeling okay and that you are safe.

- a. If a participant expresses that she is interested in counseling services related to any aspect of the interview, refer the participant to the services offered at the Holy Cross Dispensary.
- b. If a participant indicates psychological distress and is in need of immediate service, contact Sr. Eileen, the on-staff psychiatric nurse, for assistance.